

3.2.1

CHILDREN'S TELEVISION WORKSHOP EXPLORES THE WORLD

# CONTACT<sup>®</sup>

JULY/AUGUST 1990

*Blade  
Runners!*



**Plus:**

**Bats in a Different Light**

**Summer Science Experiments**

**Why Fear Can Be Fun**

**Square One Math Puzzles**

#495B\*\*\*\*\*5-DIGIT 15126  
#BYD5027P098# C01  
640444 BYD 5027P097 0648  
DEC 90  
JENNIFER BOYDE CJUS  
5027 PHEASANT WALK #DP  
IMPERIAL PA 15126-9203



# FREE JETSONS <sup>The</sup> movie JET CAR

FROM

(WITH 15 KOOL-AID POINTS)

## Kool-Aid

SOFT DRINKS BRAND

Just follow the maze below  
to get an amazing offer  
that is out of this world.

### 1. GO!

Fly over to your nearest galaxy grocery store. Have your robot pick up lots of Kool-Aid® Brand Soft Drinks, Kool-Aid® Coolers® Juice Drink, and Kool-Aid® Brand Kool Pops® Frozen Drink Bars to collect Kool-Aid points.

GROCERY  
STORE

### 2. CHECK!

To see which movie theater  
near you is participating  
in this offer, dial  
**1-800-KIDS FUN.**

CAUTION  
BLACKHOLE!

### 3. FINISH!

Get a FREE  
JETSONS®: THE MOVIE  
Jet Car when you present  
**15 Kool-Aid points**  
at participating  
movie theaters.  
•Limit one free car  
per person,  
while supplies last.

COMET ALERT

ORBIT THEATER

HEY KIDS!  
THE MOVIE OPENS JULY 6



Publisher  
Nina B. Link  
.....  
Editor-in-Chief  
Jonathan Rosenbloom  
Art Director  
Al Nagy  
Senior Editor  
Curtis Sieplan  
Associate Editors  
Russell Ginns  
Elizabeth Vitton  
Assistant Art Director  
Nadina S. Simon  
Editorial Assistant  
Rhetta Aleong  
.....  
Director of Research/Magazine Group  
Dr. Renee Cherow-O'Leary  
Magazine Research Manager  
Donna Sabino  
Research Assistant  
Julie Seyfert  
.....  
Director/Creative Services  
Aura Marrero  
.....  
Vice President/General Manager  
Bill Hitzig  
Director of Finance  
Julie K. Andersen  
Circulation Director  
Kathleen O'Shaughnessy  
Subscription Manager  
June Wick  
Circulation Marketing Manager  
Jane Cazzolis  
Production Director  
Carlos N. Crosbie  
Senior Production Manager  
Sharon D'Jaha  
Production Manager  
Carolyn Ahrens  
.....  
Advertising Director/Magazine Group  
Linda Vaughan  
National Sales Manager  
Gail Delott  
Advertising Sales Category Manager  
Karen Siegel Gruenberg  
Senior Sales Representatives  
Denise D'Amour  
Theresa Innis  
Sales Representative  
Lynne Bierut  
Advertising Research Coordinator  
Alicia Lane-O'Neill  
.....

#### ADVISORS

Dr. Gerald S. Lesser  
Professor, Harvard Graduate  
School of Education  
Dr. Charles Walcott  
Director, Lab. of Ornithology,  
Cornell University  
Dr. Jeann Walker  
Professor of Physics,  
Cleveland State University  
Dr. Charles A. Whitney  
Professor of Astronomy,  
Harvard University



Winner/National Magazine Award  
General Excellence



Award Winner/Feature Category

3-2-1 Contact (ISSN 0195-1105) is a publication of the Children's Television Workshop, published ten times during the year, monthly except for February and August. © 1990 Children's Television Workshop. All rights reserved. All contents owned by the Children's Television Workshop and may not be reprinted without permission. 3-2-1 Contact is a trademark and a service mark of the Children's Television Workshop. Printed in the U.S.A. Number 108, July/August 1990. Editorial offices: One Lincoln Plaza, New York, N.Y. 10023. Send subscription orders to 3-2-1 Contact, P.O. Box 53051, Boulder, CO 80322-3051. POSTMASTER: Send address changes to: 3-2-1 Contact, P.O. Box 53051, Boulder, CO 80322-3051 (including label from cover of magazine). Subscriptions: 1 year U.S.A. \$15.97. Canada and other countries add \$6. Second-class postage paid at New York, NY and additional mailing offices. Bulk copy rates to schools and other institutions available on request.



# C O N T E N T S

## FEATURES

- 8** On the Edge:  
In-Line Skates Are a "Rad"  
New Fad

- 12** Night Flyers:  
These Creepy-Looking  
Bats Are Nature's  
Heroes

- 18** Screamers!  
For Some Kids, Feeling  
Scared Is All Part of the  
Fun

- 22** Sizzling Summer Science:  
Experiments for You to Do

## SQUARE ONE TV

- 30** Kooky Clock Puzzles

- 32** The Costly Show:  
A Comic Puzzle

- 35** Wonder About the  
Wonder Years!

## ON OUR COVER

In-line skates are the latest sports fad to come your way. Photo: © ALL-SPORT USA/Nathan Bilow



12



18



32

## DEPARTMENTS

TNT: Newsblasts **2**

Contact Lens **4**

Any Questions? **6**

Reviews **16**

The Slipped Disk  
Show **24**

The Bloodhound  
Gang **26**

Factoids **36**

Mail **38**

Basic Training **40**

Extra! **42**

Did It **44**





## Disappearing Act

It's the case of the disappearing frog—and scientists say it's an alarming mystery. Many species of frogs—as well as toads and salamanders—are rapidly disappearing from rivers, ponds, rain forests and mountains around the world.

Scientists are trying to discover the reasons for the decline. Some say that the major cause is human destruction of areas where animals live. Others point to local droughts.



PHOTO © MICHAEL FODDEN / ANIMALS ANIMALS

But the real mystery is what might be killing frogs in nature preserves—where the animals are protected. Many scientists believe that water, air and soil pollution may be poisoning many species. Amphibians breathe through their moist skins, so pollutants in soil or water can easily pass into their bodies.

"If frogs and salamanders are dying off in droves, there's a message there for us," said



Dr. David Wake, a biologist. "Until recently, these animals have been around for 70 million years. Maybe our world has become too polluted."

*Story suggested by Michael and Daniel Narayan, Vienna, VA*



## Sillier Putty

What is 40 years old and can be stretched, pounded, molded and bounced? If you guessed Silly Putty—you're right! Even though it's a toy, Silly Putty has been used for some not-so-silly purposes. In 1968, it went to the moon. Astronauts used it

to fasten down tools in the weightlessness of their space capsule.

And researchers have played with the stretchy stuff in the name of science. To study the Earth's crust, scientists have built Silly Putty models of the Earth's surface. Silly Putty has even

been used to make hand and foot prints of gorillas in zoos!

Silly Putty got its start as a laboratory accident. An engineer was trying to make artificial rubber. He mixed the chemicals boric acid and silicone oil in a test tube. The result turned out to be sillier than he thought: A gooey blob that bounced. Accidents *do* happen—it's just that some "failures" have a way of bouncing back!

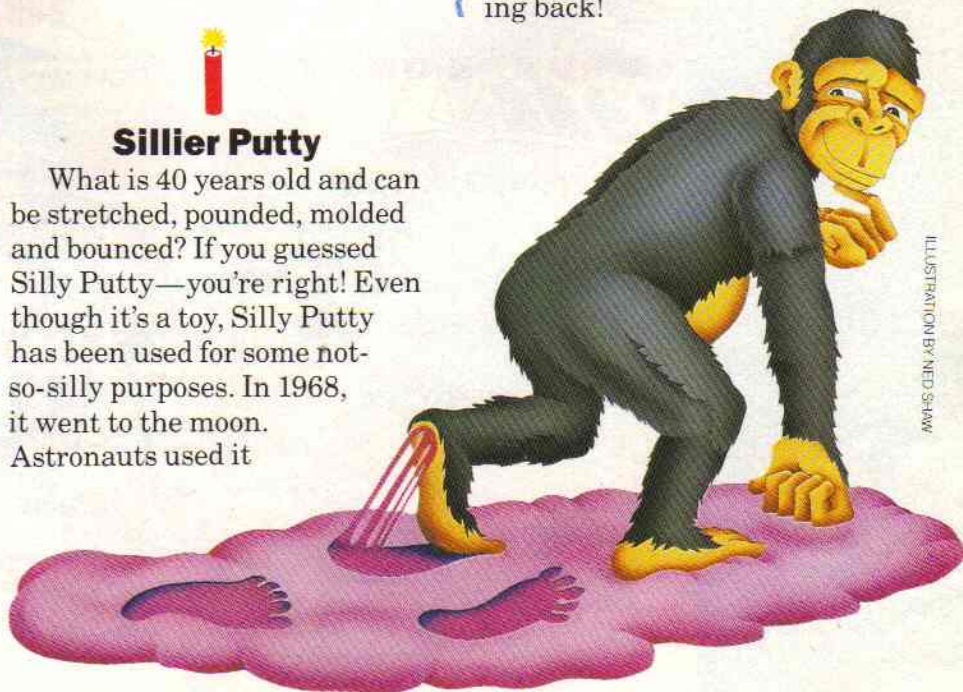


ILLUSTRATION BY NED SHAW



## Cracking Up

Has the moon been causing sparks to fly? According to many stargazers who say they've seen the light, the answer is yes.

When looking through telescopes, some people have reported seeing bright blue or red flashes on the moon's surface. These sparks last only a

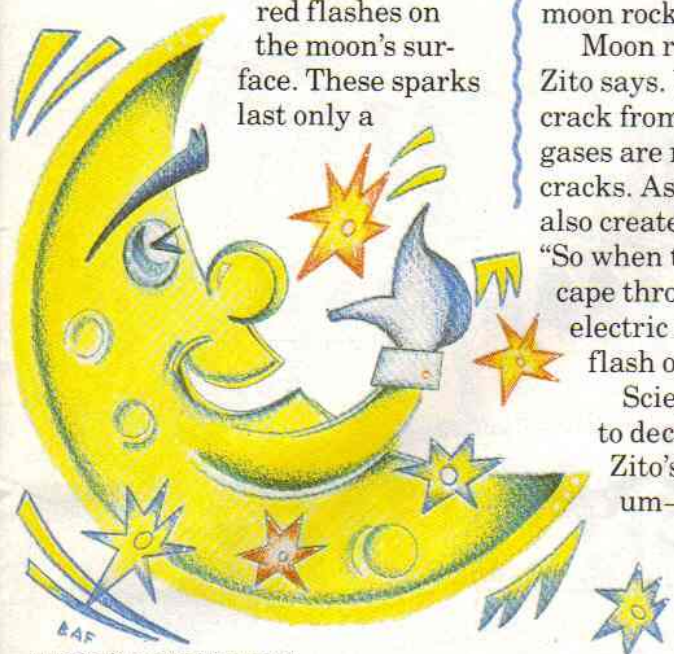


ILLUSTRATION BY BARBARA FRIEDMAN

fraction of a second. They are usually seen near the western edge of the moon—although scientists don't know why.

What causes these spacey events? Richard Zito of Lockheed Missile and Space Company has come up with a possible reason for the flashes: moon rocks.

Moon rocks are rich in gases, Zito says. When the rocks crack from heat pressures, gases are released through the cracks. As the rock cracks, it also creates static electricity. "So when the puffs of gas escape through the cracks, the electric discharge causes a flash of light," Zito explains.

Scientists will now have to decide whether or not Zito's theory is all it's—um—*cracked up to be*.

## Incredible Edibles

Small is better, according to plant breeder Perry Nugent. For three years now, he's been trying to produce a melon small enough to sell in a vend-

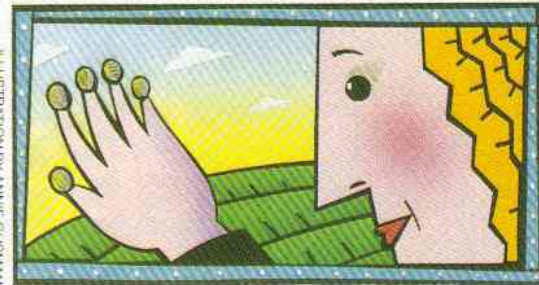


ILLUSTRATION BY ANNIE GUSMAN

ing machine. Nugent also wants to come up with a melon that can be eaten skin and all.

Nugent has bred cantaloupes and honeydews with dozens of different kinds of wild melons. But he is still not wild about the results.

He has come up with a grapefruit-sized melon that is sweet, although tough to chew. But that's not stopping Nugent. He predicts "finger fruits" will be ready in the next five years.

## Fatal Attraction

It seems that some spiders will go to great lengths to grab a bite to eat. Since many insects can see and avoid spider webs, spiders have had to develop tricks to snare a meal.

Their "welcome mats" are spun from a special silk designed to attract unsuspecting visitors. Many silks—especially the whitish globs near the center of webs—actually reflect ultraviolet (UV) light. (Ultraviolet light is a range of colors that humans can't see with the naked eye. However, many insects can.)

"These spiders are sneaky," said Gary Bernard, an expert on insect vision. "The silk globs

on their webs reflect UV light, which attracts insects."

Insects use UV light to find food. The UV reflectors in webs seem to trick the insects into thinking there is food there. "By the time an insect discovers its mistake," says Bernard, "it's too late."



PHOTO © DANNY BRASS/PHOTO RESEARCHERS, INC.



## So What's New?

You tell us and you'll get a nifty CONTACT T-shirt—if we print your story. Send us any science story from the news that you think our readers would like to know about. (Be sure to tell us your T-shirt size and where you heard the story.)

Send to:

**TNT**

**3-2-1 CONTACT Magazine**

**1 Lincoln Plaza  
New York, NY 10023**



# CONTACT LENS

## PISA IN PIECES?

Is the Leaning Tower in Pisa, Italy, falling down? Some Italians think so—even though the 817-year-old monument has survived earthquakes, World War II and nearly one million visitors a year.

The Italian government upset residents of the city by closing off the tower to visitors. Officials think that the 249-step climb to the top has become too risky because the marble columns have begun to crumble and the foundation is shaky.

The tower has been on shaky ground for awhile. It began to tilt 12 years after workers started to build it in 1173. Since then, the 179-foot-tower has leaned more than 16 feet.

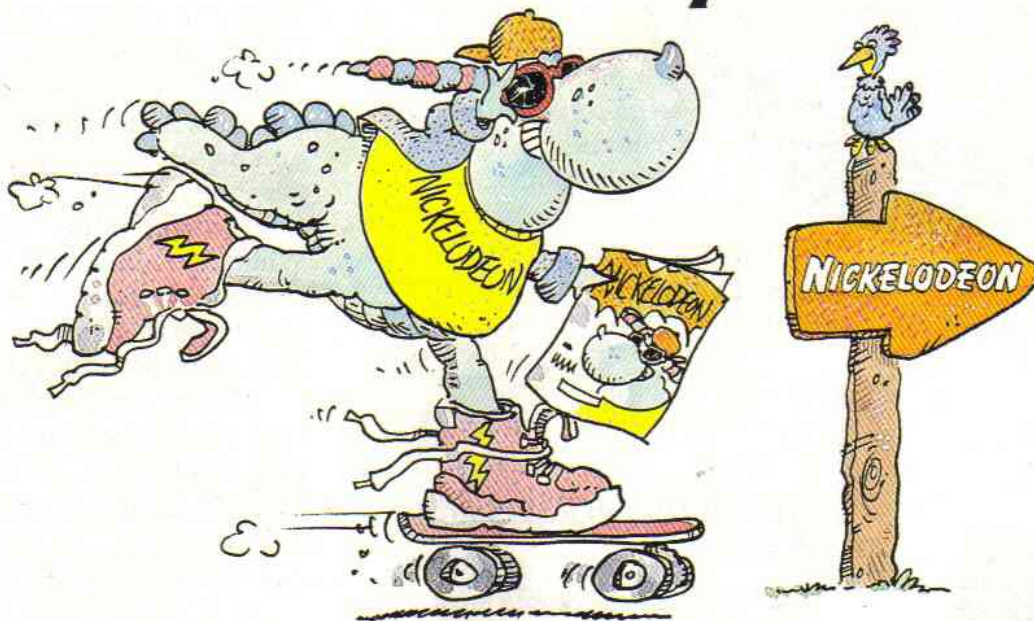
But even though the tower leans, many scientists feel it won't collapse for at least 200 years. Maybe that's why no one seems in a hurry to fix the "problem." Whoever heard of the *Straight Tower* of Pisa, anyway?



PHOTO © MICHAEL J. HOWELL/THE STOCK SHOP



# HEY! Now you can have Nickelodeon anywhere.



It's a Magazine...It's a Club...It's a Store.

## THE NICKELODEON MAGAZINE

Month after month Nick Magazine brings you the coolest stuff about:

**Your Favorite Celebrities**—Hear what they have to say and see which one gets slimed next.

**Game Zone**—The toughest mazes and word benders around.

**Nicktoons**—Featuring comics like Pork Avenue and Flat Cat. Check 'em out.

**Nick Rocks**—A rock 'n' roll photo quiz with the freshest groups.



## THE NICK CLUB CARD

Don't Grow Up Without It!

Your own 3-D hologram card will get you special offers or discounts at these places.



NC101



**"TCBY"**

The Country's Best Yogurt.

AND MANY MORE TO COME.

## THE NICK STORE

Get special "Kids Only" prices.

Each month you can order the coolest books, compact discs, cassettes, videos, posters, hard to find Nick hats, t-shirts and other great stuff.



Mail to: Nickelodeon Club, P.O. Box Nick-1, Indianapolis, IN 46291-0163

☐ **Yes!** I want to be a member of the Nick Club for a year and get 12 FREE issues of Nickelodeon Magazine plus the money saving Nick Club card for just \$9.95 (Please allow 6-8 weeks for delivery)

**Method of Payment:** ☐ Check or Money Order (payable to Nickelodeon Club)

Charge my club membership to: ☐ MasterCard

☐ Diners Club ☐ American Express ☐ Visa

Account # \_\_\_\_\_ Valid Through \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_

Signature \_\_\_\_\_

Name of Parent or Guardian \_\_\_\_\_

Kid's Name \_\_\_\_\_ Date of Birth \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

The club reserves the right to request additional information or reject any application. Offer limited to new members in the U.S.A. only. Local taxes if any will be added. "Nickelodeon Club" is a service of BMG Direct Marketing, Inc., 6550 East 30th Street, Indianapolis, IN 46219-1194. "Nickelodeon" and "Nick" are registered trademarks owned and licensed by MTV Networks, a division of Viacom International Inc. "Game Zone", "Nicktoons", and "Nick Rocks" are trademarks owned and licensed for use by MTV Networks, a division of Viacom International Inc. Other trademarks used in advertising are the property of various trademark owners. Copyright 1990 MTV Networks. All rights reserved.

TAH

NB



# ANY QUESTIONS?

By Renée Skelton

## WHY ARE SOME PEOPLE ALLERGIC TO THINGS?

Achoo! Millions of people have allergies. A person can be allergic to almost anything — grass, fur, dust, food. What *you* might be allergic to depends on your body. And the things that make you itch or sneeze might not bother someone else.

What starts the itching and sneezing? An allergen (say: AL-ler-jin). It's a substance — maybe food or pollen — that causes a reaction when it enters or touches the body.

Often the allergen is harmless, but your body mistakes it for something harmful. So you produce antibodies to defend your system.

The allergen-antibodies set free a substance in your cells called histamines (say: HISS-tuh-meenz). The histamines make tissues in your nose, skin or windpipe swell or itch. And that's what makes you feel so bad.

Drugs called *antihistamines* stop the itching, redness and sneezing. They can't cure the allergy — but, what a relief!

*Question sent in by Anjanette Werner, Pleasanton, CA.*



## WHY ARE KANGAROOS ONLY FOUND IN AUSTRALIA?

Millions of years ago all of the Earth's continents were connected. Scientists call this huge land mass Gondwanaland.

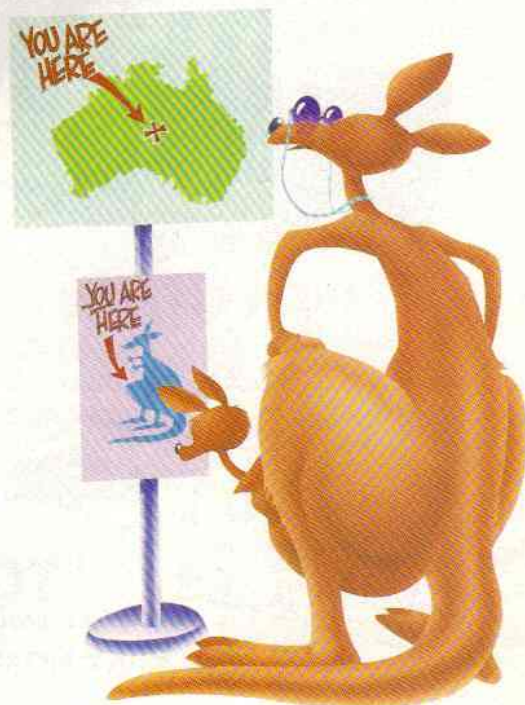
Back then, the only mammals around were marsupials — animals who carried their young in pouches (like kangaroos and wallabies). When marsupial babies are born, they are not fully developed. They crawl into their mother's pouch and stay there until they develop fully.

About 50 million years ago, the land we call Australia broke off from Gondwanaland. It carried many types of marsupials with it. But there were still many marsupials in other parts of the world.

At this time, placental mammals began to evolve. Cats, dogs, elephants and people are placentals. Their babies develop fully in the female before birth.

In most of the world, placentals and marsupials competed for food and land. Placentals won. But marsupials were not in competition with placentals in Australia. So that's why they are still there.

*Question sent in by Lisa Donato, Clay, NY.*







## HOW

### DO SCIENTISTS DATE FOSSILS?

All living things contain the chemical carbon-14. When a plant or animal dies, no new carbon is absorbed. And the carbon-14 already there slowly breaks down. Scientists can tell how old a fossil is by using a special instrument to measure how much carbon-14 is left. (The older the fossil, the less carbon-14 it will have.)

After 50,000 years, almost all the carbon-14 in a fossil will be gone. So scientists can't use the carbon-14 method for dating *really* old fossils. They have to estimate their age.

Here's how that works: Most fossils are found in rocks that have been pressed tightly together in layers. Older rock layers are usually at the bottom. The younger layers rest on top of the older ones.

Scientists can estimate how old a fossil is by examining the layer of rock in which the fossil was found.

*Question sent in by Sean Commander, Nacogdoches, TX.*



## DO

### THEY HAVE A LIST OF NAMES FOR HURRICANES OR DOES ONE PERSON CHOOSE THE NAME?

One person doesn't choose — a whole bunch of people do. Scientists from all over the world suggest names. Then the World Meteorological Organization makes up the lists.

There are two sets of hurricane lists for the U.S. mainland: One for the East Coast, and one for the West Coast. The sets of names are listed in alphabetical order.

When the first storm of the season hits the Atlantic coast, it is given an "A" name. The second storm in the region gets the "B" name, and so on.

Both regions have six separate lists of names — one for each year in a six-year period. After six years, the lists are recycled. Some names only get used once. The names of big, destructive storms — like Hugo — are retired. Another H name will take Hugo's place when the 1989 Atlantic storm list is used again in 1995.

By the way, you'll never hear of a hurricane named Quincy or Zelda. There are few names that begin with Q, U, X, Y or Z. So none are on the hurricane name list.

*Question sent in by Eliza Ciccotti, Gillett, PA.*

Do you have a question  
that no one seems able to answer?  
Why not ask us? Write to:  
Any Questions? 3-2-1  
Contact, P.O. Box 40, Vernon,  
NJ 07462



# ON THE

## IN-LINE



PHOTO © NATHAN BILOW/ALL SPORT USA



Move over, bikes. Step aside, skateboards. Here come in-line skates, and they're the hottest things on wheels.

About 10 years ago, hockey players started using them to imitate ice skating during the summer. But in the past few years, in-line skating, or "blading," has been taken up by skiers, cyclers and joggers. And it's on its way to becoming a major fad across the U.S.



### The Latest Craze

Today, there are about 400,000 people blading across U.S. parks and on sidewalks. That's more than twice as many as there were two years ago. "It used to be that in-line skates were mostly for hockey players



# EDGE

by Russell Ginns

## SKATES ARE A "RAD" NEW FAD



PHOTO © DAN DEAN/THE OBSERVER & EDITORIAL

**In-line skates can weigh pounds less than old-fashioned skates. That's because the wheel frames are plastic, not metal.**

and skiers who wanted to keep in shape during the off season," says Mary Haugen. She works for Rollerblade, Inc., a company that makes in-line skates. "Nowadays, however, we're selling most of them to folks who just want to have fun," she told CONTACT.

"Sometimes, people in suits go blading by on their way to work," says Kelly Lind, 13, who skates along the boardwalk in Venice, CA. "I've even seen a woman on in-line skates pushing a baby carriage."



### What's New?

Regular roller skates have two sets of wheels side by side. In-line skates have four or five wheels in a row. This may not seem like much of a difference. But, to serious bladers, it's a whole new sport.

"It's like ice skating on pavement," says Jim Denty, 14, from San Diego, CA. "You can

glide like a skier and turn like a skater. Best of all, you can go really fast!"

Just how fast you *can* go depends on how good a skater you are, and also on what your skates are like. Jim Denty says, "Lots of people think that the number of wheels on a skate affects speed."

"But that has nothing to do with it. Some skates are faster because the wheels are made of harder materials and weigh less." Harder wheels don't flatten as much as soft wheels



do. So much less of the skate is touching the ground. That means there is less friction—rubbing between two surfaces—to slow the skates down.

“Regular roller skates steer the same way a car does,” says Andrzej Malewicz. He is a skate designer in Eden Prairie, MN. “When the axles turn, friction between the wheels and the ground drags the skates until they point in a new direction.

“In-line skates steer more like a bicycle,” Malewicz told CONTACT. “In order to turn, a skater just leans in the direction that he or she wants to go.” There is less friction and more speed.

How much more? Olympic skier Cary Adgate told CONTACT that he’s reached a speed of more than 45 miles per hour on the fastest in-line skates!

According to blading fans, in-lines ride smoother and are easier to control than regular roller

skates. “If you’ve ever gone ice skating or skiing, you’ll pick it up right away,” says Jim Denty. “But make sure you spend some time learning how to stop.”

Patti Bosta, a figure skater who goes blading in warm weather, agrees. “You can’t just turn sideways and come to a halt,” she says. Instead, in-line skates have a plastic stopper on the heel of one skate. To slow down, a blader drags the stopper against the ground.



## An Old Idea

Blading may be a hot new fad, but, according to John Sundet, president of Rollerblades, Inc., “In-line skating was actually invented more than 200 years ago.”

In fact, the very first roller skates were in-line skates.

“They were built in the early 1700’s by a Dutch inventor who wanted to simulate ice skating in the summertime. He did this by nailing wooden spools to strips of wood, which he attached to his shoes,” says Sundet.

But the new invention never caught on. Most people first learned about roller skates years later. In 1760, an instrument maker named Joseph Merlin wore a pair of wheeled boots to a costume party.

“He rolled into the party playing a violin,” Sundet says. “Unfortunately, he never learned how to stop or steer the skates!”



## Warning!

Because stopping is still one of the toughest parts of blading, skaters should always wear hel-

Practice makes perfect. These skaters are sharpening their turning skills.

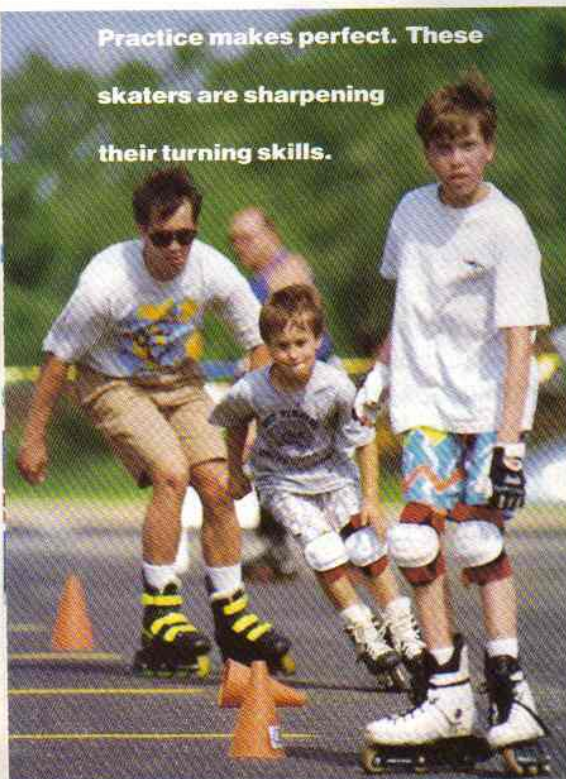


PHOTO © NATHAN BILLOW/ALL SPORT USA

Who says you can't play hockey without ice?

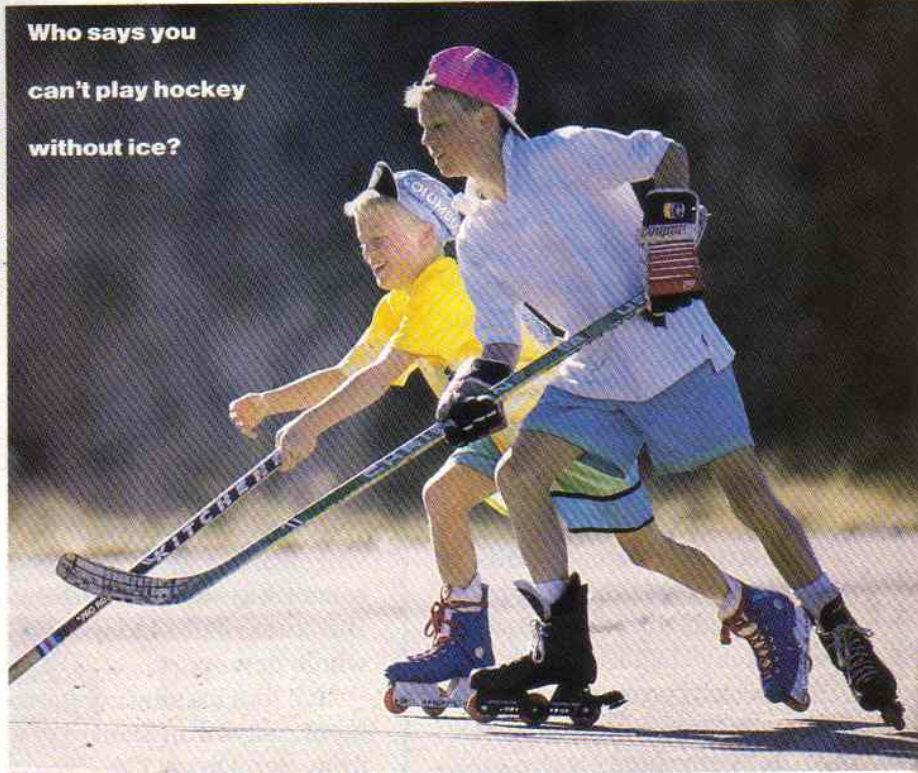


PHOTO © DAN DEAN/THE OBSERVER & ECCENTRIC



**Some kids flip  
over in-line  
skating!**



PHOTO © DAN DEAN/THE OBSERVER & ECCENTRIC

mets, gloves and knee pads.

Bill Grogan, who works at a sports equipment store in Pittsburgh, PA, pointed out the real danger in the new sport. "Right now, people who buy the skates usually buy less padding than skateboarders do," he told CONTACT. "That's because parents are often there to help pay for skateboard gear and they insist on lots of protection. But the average skate buyer is a few years older and may buy his or her equipment without help from mom or dad."

"This is the kind of sport that makes people really want to show off," says skier Cary Adgate. "I've never taken a spill, but I've seen some other people wind up with some pretty scraped-up knees." His advice is to find a park to skate in and to "Stay away from any kind of a slope unless you really know what you are doing."



## **On A Roll**

What is the real reason that blading is becoming so popular?

"People are doing it because it looks cool," says Leon Greene, who skates in New York City's Central Park. "A lot of people who used to roller skate went over to skateboards. This could win a lot of them back."

David Craig, another blader, agrees. "I love to see people stare as I fly by," he says.

But blading will probably attract less stares in the future, as more and more people are putting on their skates and hitting the road. ♦



# NIGHT FLYER

By Lisa de Mauro

Bats have been getting some bad press, and it's not fair says Merlin Tuttle, a real life "bat man."

**T**he cave is called *Cueva del Tigre* (cave of the tiger). Dr. Merlin Tuttle was walking slowly into the darkness. His mission: To find bats. All of a sudden there was a loud hissing sound—like the sound of a large cat.

"I flattened out fast," Dr. Tuttle told CONTACT. "If there was a mountain lion or a jaguar who wanted to get out, I

didn't want to block its way. Then I discovered that the hissing was coming from two baby turkey vultures! That may be how the cave got its name. Someone went in, got really scared and fled thinking there must be a wild cat in there. And it was really just some baby birds."

Dr. Tuttle is a mammalogist—an expert on mammals—



body was so misinformed about them. And it was hard to get anybody to believe the truth without showing them a picture."

## Batty About Bats

But how did his interest in bats begin?

"I was interested in bats from the time I was nine years old," Dr. Tuttle says. "I flunked the fifth grade because I was busy studying bats!"

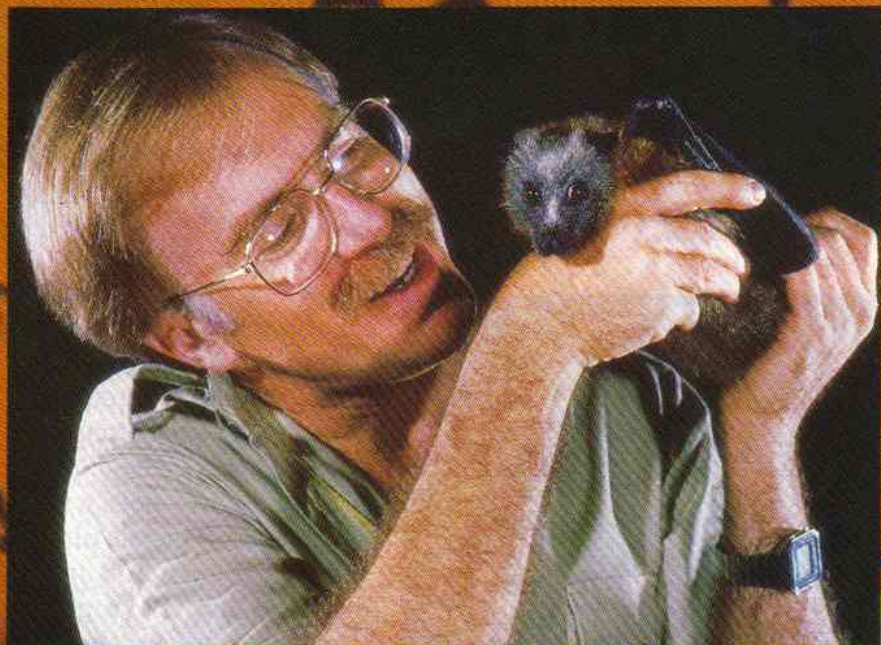
While he was in high school, he spent a lot of time studying some gray bats that were roosting in a cave near his home in Tennessee. He realized that the bats were only around part of the year. They must be migrating—moving—to another cave for the winter.

But experts at the time thought that gray bats did *not* migrate. "So I talked my parents into taking me to Washington, DC, to the Smithsonian Institution," Dr. Tuttle recalls. There, he spoke with bat scientists about his findings.

The experts gave the high school student a chance to test his ideas of gray bat migration. They sent him home with several thousand bat bands. (A band is a small numbered metal strip that can be wrapped around a captured bat's leg. Then the animal is set free. If it is caught again in another area, it can be identified.) The whole Tuttle family set to work catching and banding the bats.

After the bats left for the season, someone mentioned a cave 100 miles away where bats slept through the winter months. Amazingly, the banded bats were in that cave. The theory was proven true. The gray bats were migrating. ☞

**Merlin D. Tuttle**  
and friend, a bat  
called a flying fox.



who specializes in bats. He knows that gentle creatures, such as the turkey vulture, can be frightening when they are misunderstood. So he has taken what he learned in that cave to help people better understand another gentle creature: the bat.

To help make his point, Dr. Tuttle takes lots of photos of bats. He explains his reasons

this way: "Most of the bat pictures taken in the past made the animals look terrible. The reason: A bat was usually caught and put into a cage. The scared bat would show its teeth. And the photo showed a 'vicious' bat."

Dr. Tuttle wanted photos of bats acting naturally. "I started photographing bats out of necessity," he says. "Every-



**A Pallid bat  
feeds on its  
favorite food—  
a grasshopper.**



## Bats in Danger

Gray bats once filled the summer evening skies in the southeastern U.S. Today, gray bats and many other types around the world are in danger of dying out. To help save them, Dr. Tuttle started up an organization called Bat Conservation International (BCI).

The first purpose of BCI is to teach people they have nothing

to fear from bats. "Bats are among the most naturally gentle animals on Earth," says Dr. Tuttle. "They're highly intelligent and valuable to have around."

In other words, they are important to humans—more important than most people realize. What has a bat done for you lately? You might be surprised!

Most bats eat fruit, flower

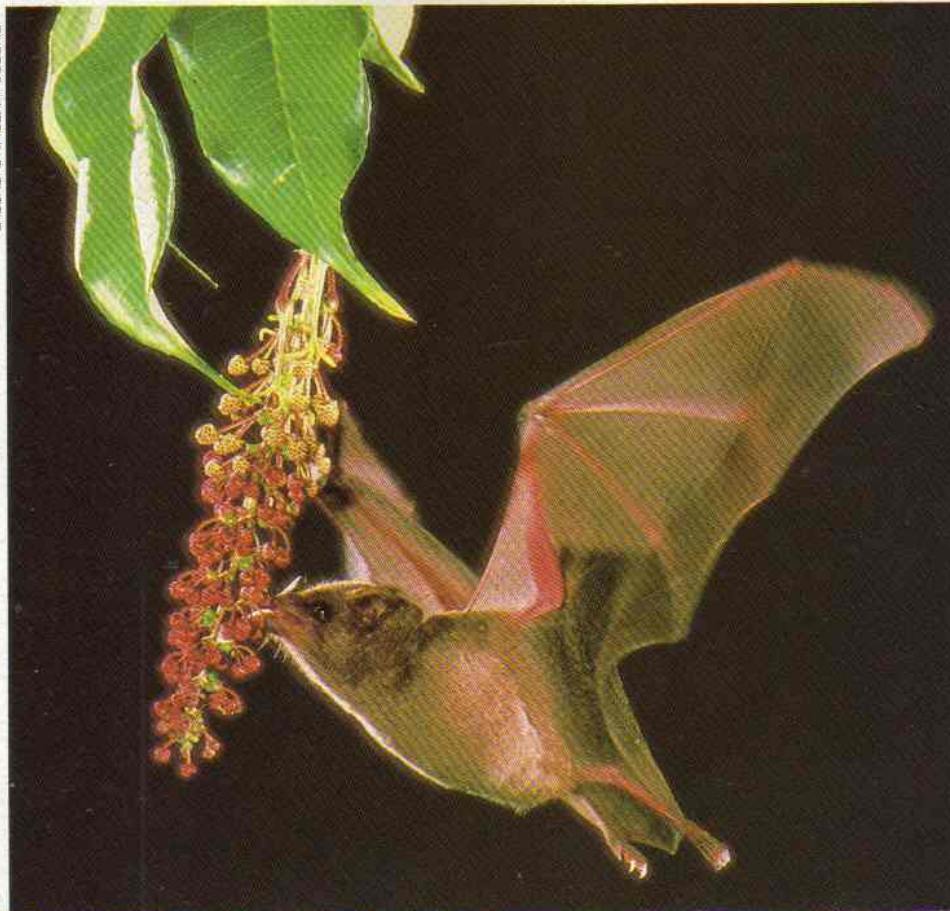
nectar or insects. The fruit eaters are really the "Johnny Appleseeds" of the bat world. When they eat, they swallow only the juice and the mushy parts of the fruit. By spitting out the seeds, they sow new plants for future generations of bats—and people.

Nectar-feeding bats in the tropics do the same job that bees, butterflies and some birds do in North America. They bring pollen from one flower to another. The bats drink the nectar from flowers. As they feed, pollen from the flower sticks to their fur.

When the bats move to another flower, the pollen the animals carry goes with them and rubs off on the plant. So the bats help many different tropical plants to reproduce.

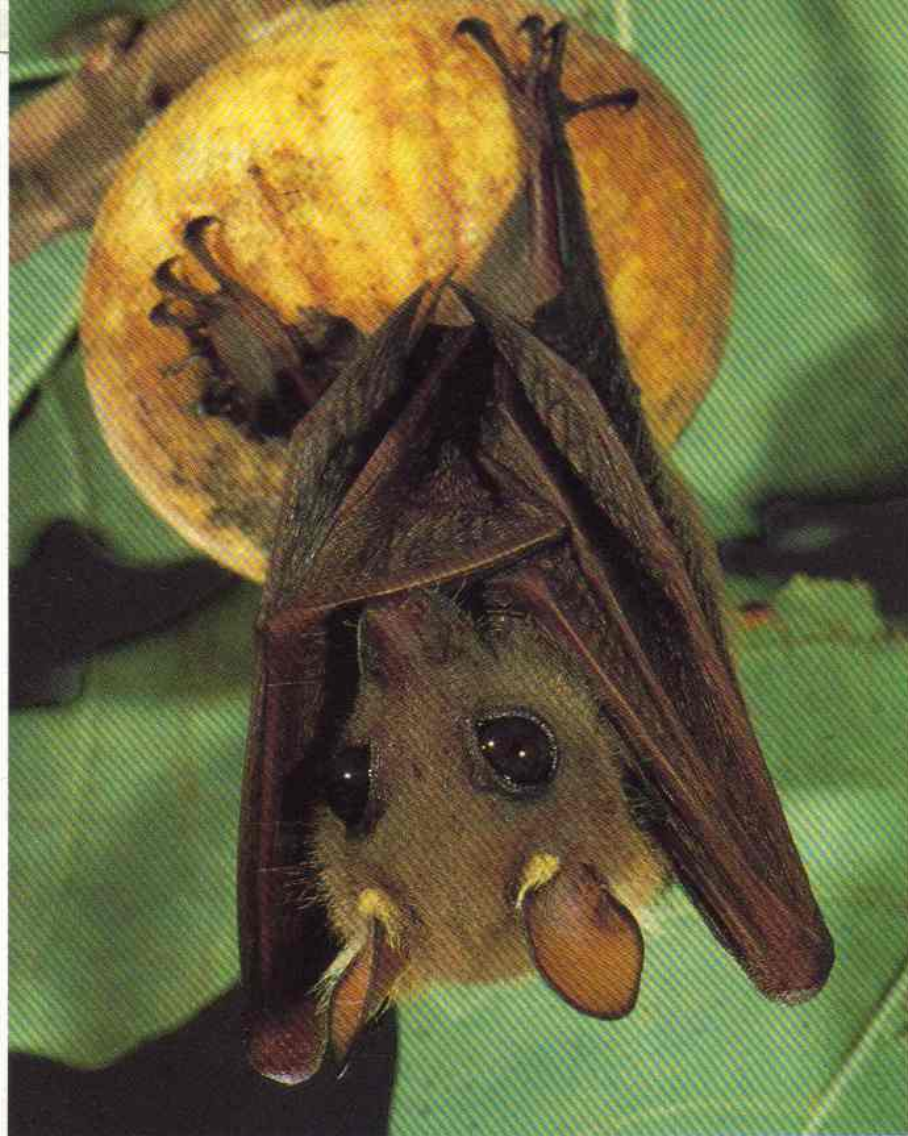
If it weren't for the fruit eaters and the nectar drinkers, there would be no peaches, figs, bananas, mangoes, avocados, cashew nuts or chicle latex for chewing gum. Because bats help rain forest plants to repro-

**This common long-  
tongued bat pollinates  
flowers found in  
the rain forests.**



PHOTOS © MERLIND TUTTLE





duce, most scientists agree that bats are an important part of the life cycle of tropical rain forests.

Of course, bats aren't only important to rain forests. In North America, 40 different types of bats help farmers. Most of the animals eat insects. One of the most common bats, the little brown bat, can eat 600 mosquitoes an hour!

Other bats prefer beetles, grasshoppers, moths, even scorpions. Having a colony of bats nearby can be a big help to farmers who don't want insects munching on their crops. Think of it: A bug killer that doesn't use chemicals, doesn't cause pollution, doesn't need batteries and doesn't cost a penny!

## Bat Mistakes

Bats *should* be popular creatures. But they're not. They have a terrible reputation. Most people are afraid of them. Here's why:

- Bats are nocturnal—they are active after dark and they rest during the day. So bats seem mysterious, and to some people, evil.
- Bats seem like flying mice or rats, and that makes some people shudder. Actually, bats aren't even related to rodents. They're distant cousins of apes and monkeys.
- People are afraid that bats will bite them or try to land in their hair. The truth is that bats don't fly around biting people. There are, however,

**Like other bats, this dwarf bat has poor vision. Instead, it uses sound to "see" things: Its high-pitched cries echo off objects and back to it. This helps bats find their way around.**

vampire bats and they do occasionally bite people. But of the nearly 1,000 types of bats, only three are vampires. They live only in Central and South America—and they are very rare. And no one has ever discovered a bat that likes to land in people's hair.

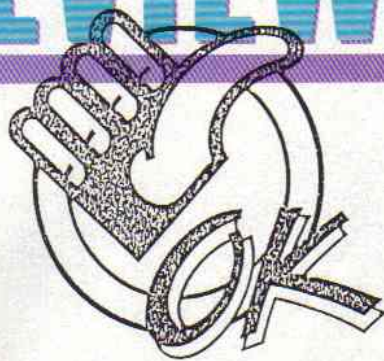
● People are afraid that bats will give them rabies. In fact, bats have no more diseases than any other type of wildlife. There have been less than 20 bat-caused deaths in North America in the last 40 years.

"Any bat that is lying around and can be picked up by a human, is more likely than the rest to be sick," Dr. Tuttle says. "So to be safe, don't ever pick up a bat," he cautions.

"I've worked with bats most of my life and they continue to amaze me. As a group, they are among the least known animals on Earth. But in terms of ecology, they are very important." And saving them may turn out to be as important to humans as it is to the bats. ♦



# REVIEWS



## BOOKS

### The Eleventh Hour

by Graeme Base

A Harry N. Abrams Book, \$14.95

Horace the elephant is a party animal. On his 11th birthday, he whips up 11 delicious dishes and invites 11 animal friends to play 11 games and enjoy the feast.

At the eleventh hour, the partygoers discover that the feast has been mysteriously eaten.

Who gobbled the goodies? Be a super sleuth and find out. Each page has hidden clues and messages. Some are tricky, but if you pay close attention to details you should be able to track down the thief.

If this mystery still leaves you scratching your head, don't worry. The answer is in a sealed envelope at the back of the book. Whether you peek or not, we think you'll have fun using your detective skills to crack this case.

—Elizabeth Vitton

### They Don't Wash Their Socks! Sports Superstitions

by Kathlyn Gay

A Walker & Company Book, \$13.95

Dwight Gooden does it. Larry Bird does it. Martina Navratilova does it. And, yes, even Mike Tyson does it.

What do these super sports stars do? We're not telling—but here's a book that'll give you the scoop.

It seems that many athletes gear up for game day in some interesting—and sometimes smelly—ways. For example, some ballplayers wear the same pair of socks each game for luck.

But this book isn't just about dirty laundry. It takes a look at the funny and strange ways that athletes "psych" themselves up for a game. If you're a sports fan, this book will be a big hit.

—E.V.

## SOFTWARE

### Nobunaga's Ambition

for IBM and Amiga computers and Nintendo Game Systems  
KOEI, \$54.95

The object of this game is to become the ruler of Japan in the sixteenth century. To accomplish this, *Nobunaga's Ambition* requires a lot of planning and brain power.

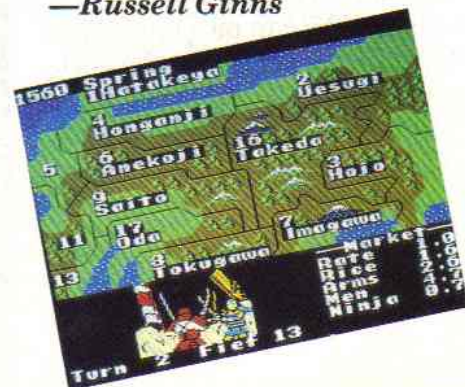
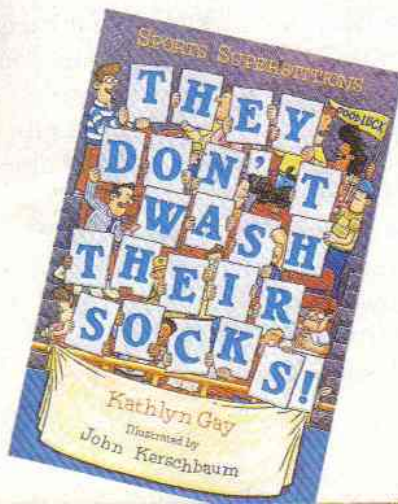
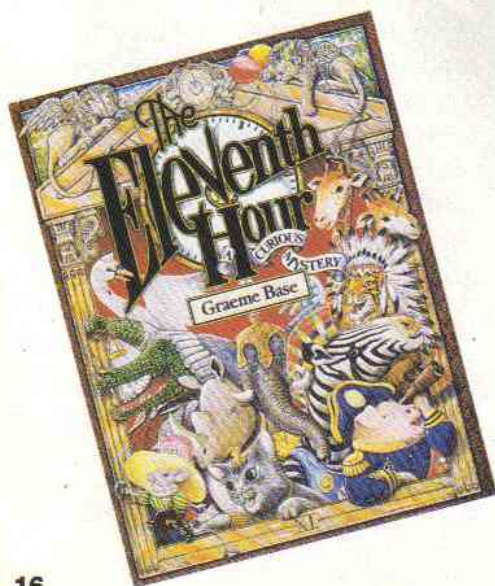
You'll have to choose which territories to take over and which characters you want to join your team. You'll also have to decide how much rice your farms need to grow, how much to pay your soldiers and even when you should give gifts to pesky neighboring rulers.

Meanwhile, the computer will be controlling more than 100 other personalities who move about the map, trying to become just as powerful as you.

*Nobunaga* is a very detailed game, with five levels of play and a map that has 57 different territories to control. Up to eight people can play at one time!

Because it is so complicated, you might want a grown-up to help you get started. But once you get going, this might be the only strategy game you'll ever want to play.

—Russell Ginns





# earn GREAT PRIZES or CASH

**\$2.00  
CASH PROFIT PER ITEM!**



STOP WATCH/  
COMPASS  
Sell Only 8 Items



AM/FM CASSETTE W/B&W TV  
Sell Only 52 Items



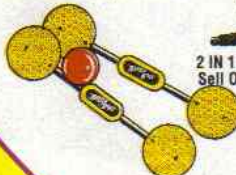
JOE MONTANA FOOTBALL  
& PUZZLE  
Sell Only 14 Items



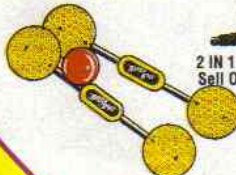
COCA-COLA TELEPHONE  
Sell Only 11 Items



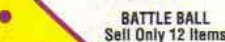
TASCO BINOCULARS  
Sell Only 15 Items



SEE-THRU TELEPHONE  
Sell Only 14 Items



2 IN 1 FISHING KIT  
Sell Only 12 Items



BATTLE BALL  
Sell Only 12 Items



VIDEO CASSETTE PLAYER  
Sell Only 88 Items



110 CAMERA  
Sell Only 6 Items



BROTHER  
TYPEWRITER  
Sell Only 67 Items



MALL MADNESS (GAME)  
Sell Only 16 Items



NINTENDO  
CONTROL DECK  
Sell Only 45 Items



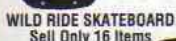
1200X MICROSCOPE  
Sell Only 27 Items



AM/FM DUAL CASSETTE  
Sell Only 26 Items



BIG BUBBA W/BATTERY PACK  
Sell Only 59 Items



WILD RIDE SKATEBOARD  
Sell Only 16 Items



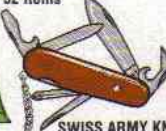
24" 10-SPEED BICYCLE  
Sell Only 52 Items



GEORGE BRETT  
GLOVE  
Sell Only 24 Items



TIMBERLINE 2 MAN TENT  
Sell Only 50 Items



SWISS ARMY KNIFE  
Sell Only 7 Items



SNO-NUT  
Sell Only 7 Items



ARCHERY  
SET  
Sell Only 21 Items



MICHAEL JORDAN  
BASKETBALL  
Sell Only 14 Items



LIL' FRIDGE  
Sell Only 9 Items



CALCULATOR  
ALARM WATCH  
Sell Only 5 Items



MUNCH-OUT SNACK PACK  
Sell Only 6 Items



150X50 TELESCOPE  
Sell Only 19 Items



TURBO WALKIE TALKIE  
Sell Only 12 Items



88 PC. ART CENTER  
Sell Only 9 Items



SNO-FOX  
Sell Only 25 Items



CASIO POCKET TV  
Sell Only 75 Items



CASIO MINI KEYBOARD  
Sell Only 17 Items



CARROM GAMEBOARD  
Sell Only 11 Items

**A SUCCESS  
STORY CAN BE  
YOURS TOO!!**



"This is my first time selling. My Mom used to sell for your Club too! I love the new prizes in the catalog. I especially hope to earn the Nintendo Game System."  
**Niki Massey**  
Sylvester, WV



"I have been a member of your club for two years. I love earning \$2.00 for each item I sell, now I can earn my prizes twice as fast!"  
**Nikia Boston**  
Decatur, GA



"I am 11 years old and have been a member for three years. My friends and relatives love what they order. I love my part-time job as a salesman, but mostly, I love earning cash!"  
**Jeremy Roach**  
Conroe, TX

It takes only one **FREE** phone call.  
Ask for free sales kit 75. **1-800-543-1201**

Give the operator your name, address and zip code.\*

\*Sorry...operators cannot answer questions. 800 service available in continental U.S.

We're standing by ready to rush your free sales Leadership Club Sales Kit, complete with gift catalog, order form and free catalog of prizes you can earn. Neighbors, friends, and relatives will love to order our quality cards, stationery, gift wrap and other gifts. It's that easy. There's no cost. No obligation. Nothing to return.

We've doubled the dollars you earn!  
It's easier and faster than ever  
to get the prizes you want,  
or \$2.00 an item cash profit.

45 Warwick Street  
Springfield, MA 01102

**SALES LEADERSHIP**  
C · L · U · B



# SCREAMERS!

By Lisa Feder-Feitel



PHOTO © CORBIS OUTLINE

PHOTO © COMSTOCK

**For some  
people, feeling  
scared is part  
of the fun**



**C**lanking and groaning, edging inch by inch, the coaster car shudders and strains to reach the top of its first hill. Twelve-year-old Russ remembers every hour-long second of his first ride on "Hercules," a roller coaster at Dorney Park, in Allentown, PA.

"All the way up, I kept thinking, it's okay, I know I won't get hurt. Then we reached the top, and I said, 'Oh no, I'm gonna die!'" Russ remembers. Russ had reason to be scared. Within seconds, the car, from a height of 16 stories, zoomed down 157 feet, and headed straight for a lake. "I screamed so loud that I couldn't hear anything else," Russ told CONTACT.

Amy, a fifth-grader from Galesville, WI, still can't forget *Gremlins*, the first horror movie she

books all hold a special appeal for some people. CONTACT asked kids and experts to explain how and why some kids like to be scared.

## Facing Fears With Friends

Eleven-year-old David described a typical "night at a horror movie" for himself and his friends in South Portland, ME.

"I always go with friends," he told CONTACT. "As long as there's someone with you, that makes you feel safer. You can also talk about it—during and after the scariest parts," he added.

Jill, an eighth-grader from Greendell, NJ, likes her horror in a cozier setting. "I'd rather watch scary movies on video at home, with my older brother," she says. "I feel safer."




Some people like to  
be scared, not amused,  
at amusement parks.

saw. The threat of those beastly little creatures stayed with her for days.

"My bed is against the wall," Amy told CONTACT, "and for at least a week I was afraid to put my legs over the side. I was sure they'd reach out and get me!"

Why do kids like Russ and Amy—and people everywhere—deliberately do things that scare them? Horror movies, amusement park rides, haunted houses, campfire stories and scary

Dr. Ron Taffel is a psychologist who works with kids and their families. He believes that most kids like to share scary events with friends, and with good reason.

"Sharing a scary event brings you closer to your friends," he says. "You can feel excited and scared. You can 'sample' all kinds of scary experiences without risk to yourself. You can have fun doing something that parents don't especially like to do. And you can do it together." 



**This roller coaster at Cedar Point, in Ohio, takes you on a fearful fall.**



Amy and her friends also like to “get loud” when they’re scared. “If I’m with a bunch of friends in a haunted house at an amusement park,” she says, “sometimes we scream and yell right back at the scary noises. Being loud calms me down—I can get it all out!”

## **Mind-Boggling, Spine-Chilling...Fun?**

The chance to “get it all out” also explains the appeal of roller coasters, says Randy Geisler. He is the president of American Coaster Enthusiasts, a roller coaster fan club with 3,500 members—including hundreds of kids—from 15 countries.

“Everyone needs to whoop and holler sometimes, just for the fun of it,” Geisler told CONTACT. “You can’t do that in your hall at school—people will say you’re weird.

“But when you’re flying at 70 miles per hour down a 100-foot drop with the wind whipping through your hair...it’s time!” he says.

Jill, David and Russ agree that the main reason they love to be scared can be summed up in two words: It’s fun.

What makes it fun? Dr. Istar Schwager, an educational psychologist, has an idea.

“Remember when you were little,” she asks, “and an adult tossed you in the air? If you knew that person, you would shriek with glee. But if that person was a stranger, it could really scare you.”

Scary events, she says, can be fun, exciting, even funny—if you know that you are safe. Movies, rides, campfire stories and other such terrifying times let you feel all the best parts of being scared—the suspense, the surprise and the relief—without the worry of getting hurt.

## **A Different Kind of Courage**

Even so, those feelings aren’t fun for some kids, and neither is the teasing that goes with it.

“It’s hardest at school,” Amy says. “If you don’t like bloody, scary stuff, kids call you chicken. And if they find out that you haven’t seen the hot new horror movies, you never hear the end of it.”

Some kids just don’t get thrills from chilling events. But that doesn’t mean that they’re wimps. In fact, it takes courage to stand up for yourself—sometimes more courage than the wildest roller-coaster ride. What would you do if you didn’t want to do or see something scary?

PHOTO © DANIEL L. FLECHT CEDAR POINT



**Jason is one frightening guy. Which is why the *Friday the 13th* movie sequels are so popular.**

PHOTO © FOTO FANTASIES



See if these suggestions work for you.

● **Stay away:** If you're terrified of something, don't do it. If you need to, suggests Russ, make up an excuse. For example, tell your friends that you get sick on roller coasters or at horror movies.

● **Stick together:** Find a friend in your group who shares your dislike for certain scary events, suggests Dr. Taffel. Plan a strategy together. When your group goes to the haunted house, for instance, you two can get popcorn.

● **Close your eyes:** It's less upsetting to be teased than to be scared for a week by the memory of a gory movie, kids and experts agree. And listen before you look. Music and sound effects tip you off that something scary is about to happen...or that it's over.

● **Speak your mind:** This is the toughest, but it can pay off, reports Jill. When her cousin dared her to try "FreeFall," a terrifying ride at Six Flags Great Adventure, in New Jersey, Jill refused. "I just said, 'Forget it, I'm not going on that.' Later, my cousin told me she respected me for speaking up."

You also have another choice, and only you can decide if you're ready to make it: You can try to do something that you find frightening.

Amy remembers how she felt when she saw one of the *Nightmare on Elm Street* movies: "My heart was pounding. I kept wishing it would be over!" But she adds, "Now that I've seen it a few times, it's not so scary."

Russ agrees. "While you're watching it, you're really on your toes. But after the movie, you think how neat and awesome it was." Adds David, "It's a good feeling, like, 'Phew, I made it.'"

Jill says she would never force a friend to do or see something scary. "But if you're not going to experience anything new," she says, "life can get a little boring. If you think you can take it, give it a try!"

That is exactly what Russ did, after his two minutes of terror on "Hercules." "I made sure that I didn't break any bones," he said. "Then I took a deep breath and got right back in line." ♦

## What Happens When You Get Scared?

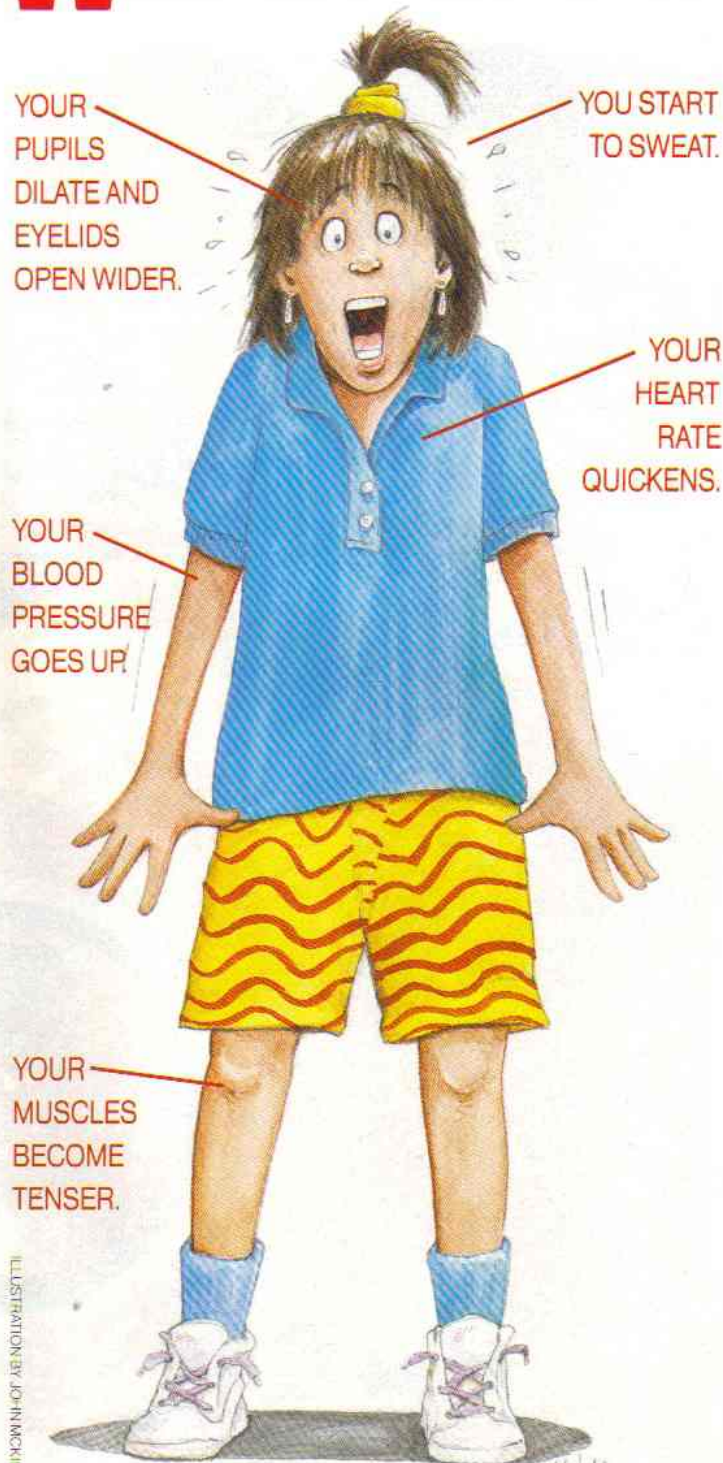


ILLUSTRATION BY JOHN MCKINLEY



# SIZZLING SUMMER SCIENCE



## BUILD A VOLCANO

Make a volcano in your backyard or at the beach or the park. It's a guaranteed summer crowd pleaser.

## What You Need

- Dirt or sand
- Water
- A small bottle with a wide neck, or a can
- A one-quart bottle or can
- White vinegar
- Baking soda
- Red dye or food coloring
- Dishwashing liquid

## What You Do

1. Make a "mountain" out of the dirt or sand.
2. Bury the small bottle inside it. Make sure the opening of the bottle sticks out of the top.
3. Pour four tablespoons of baking soda into the little bottle.
4. In the quart bottle, mix in  $\frac{1}{2}$  cup of water,  $\frac{1}{4}$  cup of dishwashing liquid, and  $\frac{1}{4}$  cup of vinegar. Add some of the red dye to make your mixture look more like lava.
5. Pour a little of the mixture from your quart bottle into the small bottle. (You should have more than enough mixture for more than one eruption.) If nothing happens right away, mix the stuff up with a stick. Then look out — "lava" should start erupting!

## Why It Works

The baking soda and the vinegar mix together. They form carbon dioxide gas ( $\text{CO}_2$ ), similar to the bubbles in soda pop. The bubbles mix with the detergent to form the lava. In much the same way that magma mixed with gas rushes to the surface, your volcanic brew should come bubbling out.





## SUMMER FROST

How can you make frost on the hottest summer day? Try this cool experiment!

### What You Need

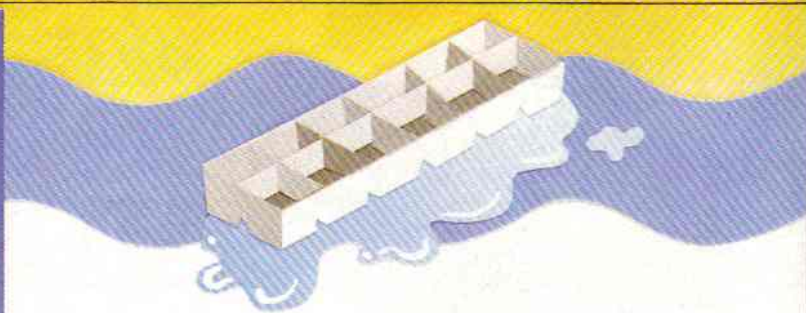
- An empty metal can (like a coffee or large soup can) that will hold about two cups.
- One cup of water
- Three to four table-  
spoons of salt
- Crushed ice

### What You Do

1. Fill the can completely with crushed ice.
2. Add the water to the can.
3. Wait two to four minutes until drops of water start to form on the outside of the can.
4. Add the salt to the water. Stir the water and the salt combination.
5. Let the can sit for about five minutes. You should see a thin layer of frost forming on the outside of the can.

### Why It Works

The salt lowers the water's temperature so the temperature of the can is lowered. The beads of water on the outside of the can freeze and you've got frost.



## SAND SCIENCE

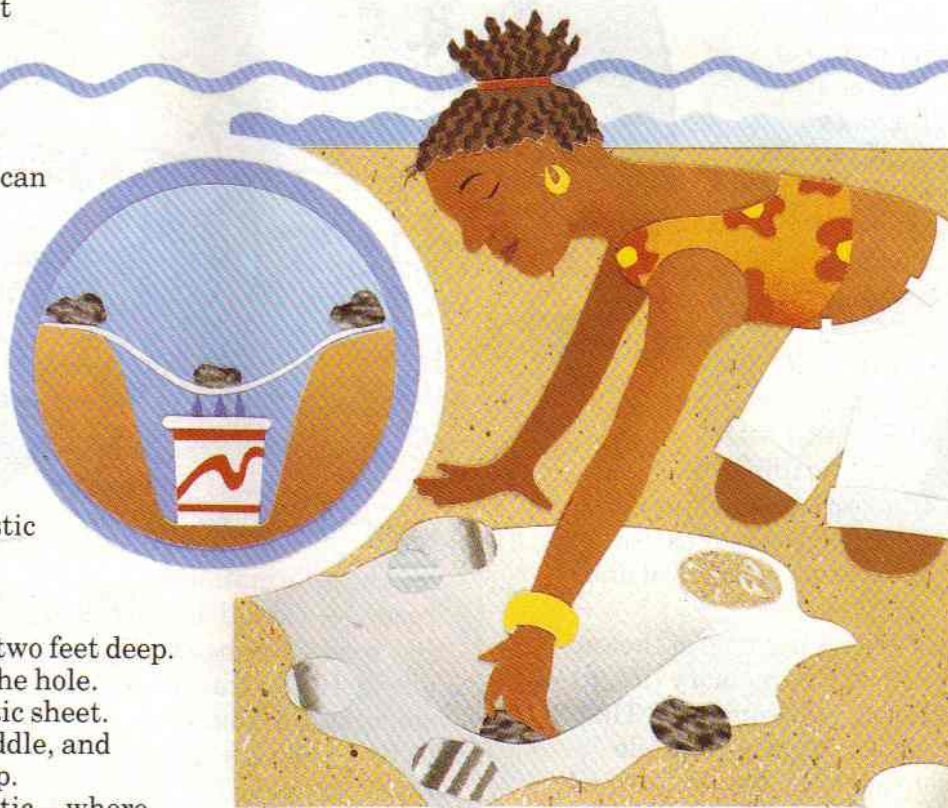
Here's an experiment that you can try at the beach. You'll discover that dry sand actually holds water—which is one of the reasons that animals can survive in the desert.

### What You Need

- A sandy place
- Several small rocks
- A paper or plastic cup.
- A plastic sheet or piece of plastic wrap about two feet long

### What You Do

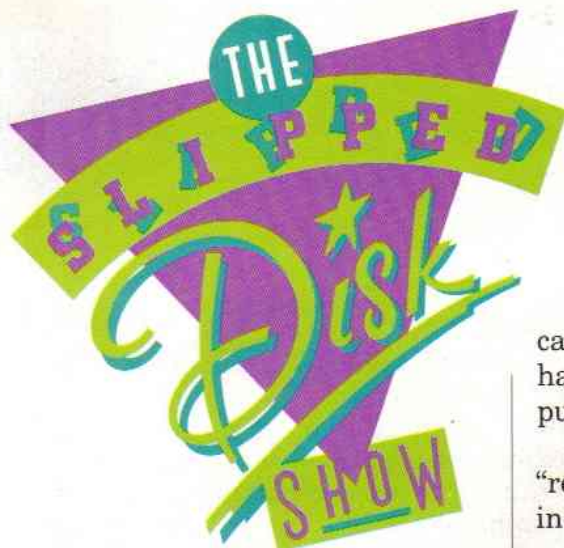
1. Dig a hole in the sand about two feet deep.
2. Put the cup in the center of the hole.
3. Cover the hole with the plastic sheet. Make sure it dips down in the middle, and hangs just above the top of the cup.
4. Anchor the center of the plastic—where it dips down—with a stone.
5. Hold the edges of the sheet down with small stones or sand.
6. Check the hole in an hour or so. Drops of water should form under the plastic and drip into the cup.



### Why It Works

The sun's heat warms the sand that is underneath the plastic. Some of the water in the sand evaporates and then gathers (condenses) on the plastic.





Robin Effron of Arlington, VA.

"Why do computer games on disks have to load but video game systems like Nintendo don't?"

Robin, before a computer can use a program on a disk, it has to be loaded into the computer's random access memory.

First the computer has to "read" the disk. The disk spins in the disk drive

on a computer chip. When you plug in the cartridge, the chip becomes part of the game system's circuits. No loading is necessary.

Our last question is from Tamara Lanham of Chicago, IL. She asks:

"What are computers made of?"

Tamara, the shell and the other parts of the computer you see are mainly made of plastic. Inside the computer you'd see circuit boards—which are basically very small wires attached to plastic boards.

At the heart of every computer are one or more silicon chips. Silicon chips can be made to act as circuits for electric currents. Each chip, which may be smaller than the fingernail on your pinky, takes the place of thousands of old-fashioned vacuum tubes or transistors.

And speaking of old-fashioned, Floppy and I are going to "23 Skidoo."

That's an old-fashioned way of saying, "We're outta' here!" But we'll be back next month, so if you have any computer questions send them to me at:

and the information on it is "read" by a small device called the "read/write head." The information is translated into computer code and sent electronically to the computer's memory.

But Nintendo and other video game systems don't use disks. Their games come on cartridges. Inside the cartridge, the game program is recorded



ILLUSTRATION BY CAMERON EAGLE

**G**reetings, computer lovers! Welcome to the Slipped Disk Show. Surf's up and my dog Floppy and I have to hit the beach. So I'm going to get right to your questions. The first is from T.J. Lorenzo of Jupiter, FL. T.J. asks: "How do hard disks hold information when the computer is off?"

T.J., inside the hard disk is a thin disk coated with a magnetic film. The film is coated magnetically and the magnetism stays until it is erased and recorded.

This is not true of the random access memory (RAM) inside your computer. That kind of memory is made up of electronic circuits and depends on voltage. When you shut off your computer, and the voltage is gone, the information in RAM goes with it.

Our next question is from





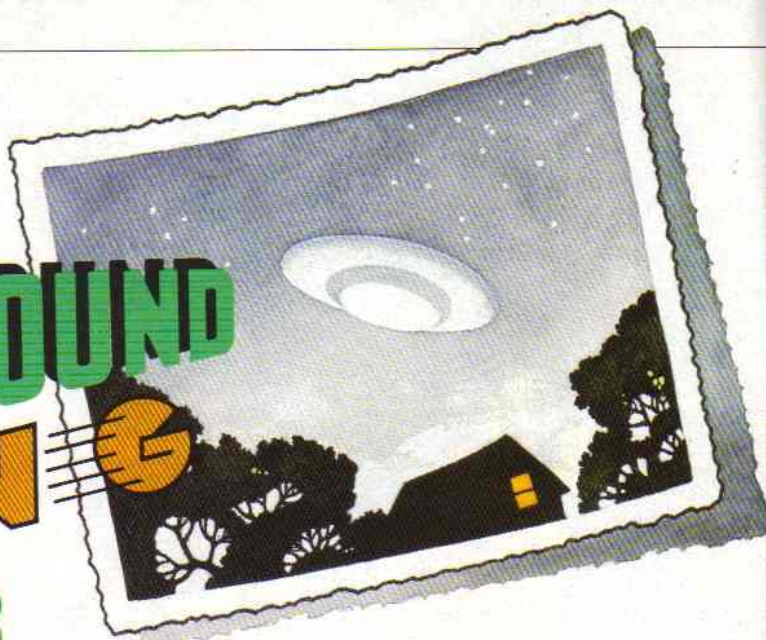
CAPRISUN®  
100%  
NATURAL

# The TASTE OF ADVENTURE





# THE BLOODHOUND GANG



## THE GREAT KRULKAN CAPER

by Curtis Slepian



"The cat burglar strikes again!" In the Bloodhound Gang's office, Ricardo was reading a newspaper story about a series of burglaries in town.

"Too bad we weren't asked to solve those crimes," said Vikki. "We haven't had a case in a month, and I'm bored."

"Yeah," said Skip. "But now I have more time to look at the stars through my new telescope. Did I tell you about the strange moving light I saw in the sky last night?"

"It was probably a satellite or a weather balloon or an airplane," said Vikki.

"Maybe it was a flying saucer," said Ricardo in a scary voice. They all laughed.



The next day, Vikki called Lt. Trowbridge on the phone. She told him the Gang wanted to help him catch the cat burglar.

Trowbridge sounded unhappy. "What's wrong, Lieutenant?" asked Vikki. "If I can't catch a cat burglar, how am I going to catch a flying saucer?"

"What?" gasped Vikki.

"Meet me at Dana Arnold's house, at 145 Wells Lane, and I'll explain."

A half hour later, the Gang pulled into the driveway of an old house off the main road.

Trowbridge met them outside the house. "The last several nights, we've been getting reports of UFOs," he said. "We've gotten a dozen calls from frightened people in this area."

"I also saw some peculiar lights in the sky!" Skip burst out.

"Not you too?" sighed Trowbridge. "Come with me," he said mysteriously, leading the Gang into the house. In the living room was a man and a woman.

"This is Dr. Mantell, a hypnotist," said Trowbridge, pointing to the man. "And this is Dana Arnold. Miss Arnold has an amazing story to tell—why don't you repeat it to the Bloodhound Gang?"

### A Spacey Story



Dana Arnold was young and pale. She seemed very upset.

"About six o'clock last evening," she said, "it was raining hard. I was in my house when I heard a loud rumbling—but it wasn't thunder. I rushed out the door and looked up. In the sky was a huge bright blue light. When the light dimmed, I saw a giant circular ship made out of metal. I ran inside the house, grabbed my camera, came out and took a picture of the ship. Here it is."



On the table was a fuzzy photo of a shiny flying saucer.

"What hapened next?" asked Skip.

"That's the problem. When I took the picture, it was six o'clock. The next thing I knew, it was eight o'clock. I don't remember anything about those missing two hours. I became so scared, I called the police."

Lt. Trowbridge said, "Dr. Mantell may be able to help jog Dana's memory."

While Dana relaxed, Dr. Mantell quickly placed her in a hypnotic trance. Dana began to describe the incredible event.

"After I took a picture of the UFO, it landed in my yard. A yellow beam of light



lifted me off the ground and into the ship," she said. "It was very damp inside. The floor was sandy. Then I saw them: crabs the size of small kids, each wearing a white smock. But they were intelligent crabs. I couldn't understand their language, but they spoke directly into my mind. A mind melt, they called it.

"They call themselves Krulkans and they come from a star near the Crab Nebula, a cloud of dust light years from us. Thousands of years ago, their ancestors had visited Earth, leaving behind a colony of crab creatures. But to the present Krulkans' surprise, their ancestors are no longer big and smart. And what's worse, they've become tasty food for humans.

"The Krulkans don't like seeing the descendants of their ancestors eaten, as you can imagine. They want to take all the crabs on Earth back to their planet. The Krulkans told me they will return here in two Earth days to begin rounding up crabs, starting at fish stores. Before they blasted off, the Krulkans removed my memory."

Dr. Mantell took her out of the trance, and Dana slumped in her seat.

### Looking for Clues



his was like a science fiction movie—but it was real!

"Take a look at this," said

Trowbridge, taking the Gang outside the house.

"Dana found this in her yard this morning," he said. On the lawn were six large, round patches of flattened grass. The patches, each about two inches deep, formed a circle. According to Dana, these flattened areas were made by the landing gear of the UFO.

Skip walked near the patches, but the ground was so soft, his feet sank up to his ankles.

They went back inside the house. Skip cleaned off his shoes with a paper towel. He threw it in a large plastic garbage can in the kitchen. The floor around the can was muddy.

"Wow! We are not alone! When the space crabs come back tomorrow, even the astronomer Carl Sagan will flip out," gushed Ricardo.





# THE BLOODHOUND GANG

"Yes," said Dana, "and I want everyone to see them—to prove I am telling the truth."

"I wonder," said Vikki under her breath.

The next day, Dana told her story to the newspapers and TV. She invited the whole town to her property to view the return of the flying saucer. Early that evening, Wells Lane was packed with traffic. Half the town was there, and most of the police force.

The Bloodhound Gang wandered through the excited crowd. Many people had brought video cameras to record the space ship. A man came up to Ricardo and said, "Hey, kid, want to buy a T-shirt?" On it were the words, "My parents visited the Krulkans and all I got was this lousy T-shirt!"

Vikki heard a boy tell his mother, "That UFO had better come soon—I don't want to miss *Alien Nation* on TV tonight."

As six o'clock approached, everyone was looking up to the skies—except Skip. He happened to notice Dana walking into her garage. A few moments later, her car pulled out of the driveway.

## Something's Fishy

As the car slowly drove past the Gang, Vikki said, "What a hot new car. Too bad it's missing a hub cap."

"Why is she leaving just when the aliens are about to return?" wondered Ricardo.

"I think I know why," shouted Skip. "Lieutenant Trowbridge, follow that car!"

Riding behind Dana's car, Trowbridge and the Gang followed her until she stopped near a big apartment house. They saw her climb in through a side window. When she came out, loaded with valuable objects, Trowbridge arrested her. She soon admitted she was the cat burglar.

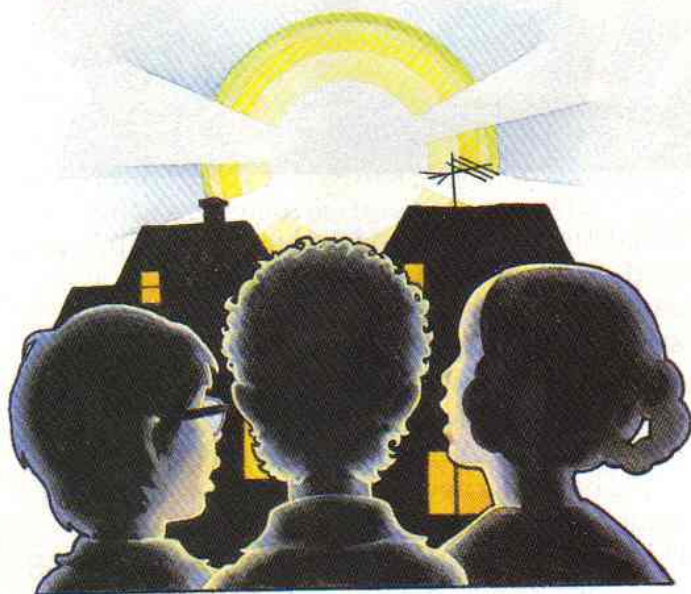
After the police took her away, Trowbridge stared at Skip. The lieutenant seemed relieved and annoyed: "How did you know?"

Skip said, "Dana just pretended to be hypnotized. She made up the whole story. I figured this out for two reasons. First, those patches on the ground weren't made by a space ship. They were made when Dana pressed her garbage can into the wet ground. That's why the floor around the can in the kitchen was muddy. And besides, my foot sank deeper in the ground than did the ship—and I'm not heavier than a space ship. Second, one of Dana's hubcaps was missing from her new car. That's because her photo of a 'space ship' is really a photo of a flying hub cap!"

"Why make up this story?" Skip continued. "Simple. Dana created the hoax so everyone in town, including the police, would come to Wells Lane. Which left all those houses empty and unprotected—and easy to rob."

Later that evening, the Gang drove back to Wells Lane. They wanted to look at the stars through Skip's telescope.

"I knew there were no such things as UFOs from outer space," said Vikki.



"Yeah," laughed Ricardo, "especially piloted by crabby space creatures who..."

Suddenly, Ricardo and the Gang became silent. From the dark sky came an odd rumbling. A strange light began to draw closer and closer and... ♦

THE BLOODHOUND GANG

Whenever there's trouble,  
We're here on the double...



# LISA FRANK® has the School Gear For Your Outrageous, New School Year



## Go Back To School With More Than Ever Before!

It's a list a mile long. Look for Portfolios, Trifold Binders, Notebooks, Locker Notepads, Pencils, Pens, Erasers, Sharpeners, Lunch Kits, School Boxes, Stickers, Stationery and Watches. All this and more is waiting for you. **Go to Food, Drug and Discount Department Stores featuring Lisa Frank products.**

## Now For The First Time You Can Wear a Lisa Frank® Designer T-Shirt

Introducing a gorgeous Lisa Frank T-Shirt. It's one of a kind. Made of the best quality 100 % heavy cotton, this collector's T features the Lisa Frank rainbow logo, splatter, cactus and puff paint! Receive your T-shirt for only \$14.95 and as a BONUS receive over 50 Lisa Frank stickers! Your Lisa Frank T will be the outrageous way to start your new school year!

Buy Lisa Frank products at these and other stores

Eckerd's  
Kroger  
Revco  
Roses  
Target  
Toys 'R Us  
Venture  
Walmart  
Walgreens

# Lisa Frank®

Goes Back To School With You



Please send me \_\_\_\_\_ Lisa Frank T-Shirt(s) for just \$14.95 ea. Every Lisa Frank T-Shirt includes over 50 stickers. Plus free postage & handling.

**CHECK YOUR SIZE:** ☐ S (16 1/2" W X 27" L)  
☐ M (18 1/2" W X 29" L) ☐ L (20 1/2" W X 30" L)

All Sizes Are Oversized.

**Send to: Designer T-Shirt Offer  
P.O. Box 5586, Tucson, AZ 85703-0586**

Name \_\_\_\_\_ Age \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Order now. Limited quantities. Checks or money orders only. (NO CASH!)  
Payable to Lisa Frank, Inc. Arizona residents add 7% sales tax. © Lisa Frank, Inc.  
Allow up to 6 weeks for delivery. 321 J/A90





ONE KOOKY

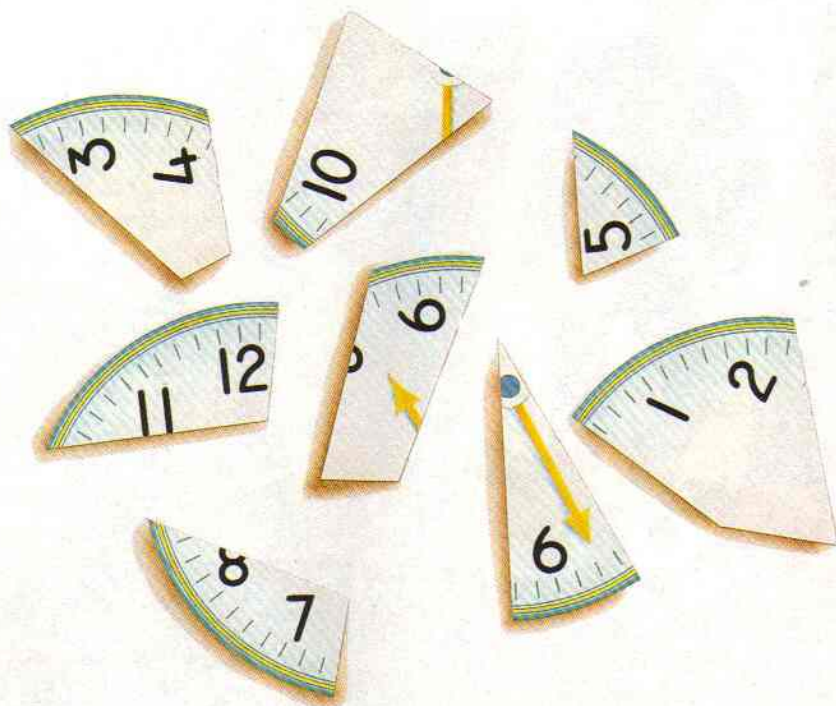
LOCO

P

U

WHAT TIME IS IT? IT'S TIME TO SOLVE OUR ...

SQUARE



### Stop Watch

Oops! Somebody dropped this pocket watch. It shattered into eight pieces. Can you figure out what time it was when the clock ticked its final tock?

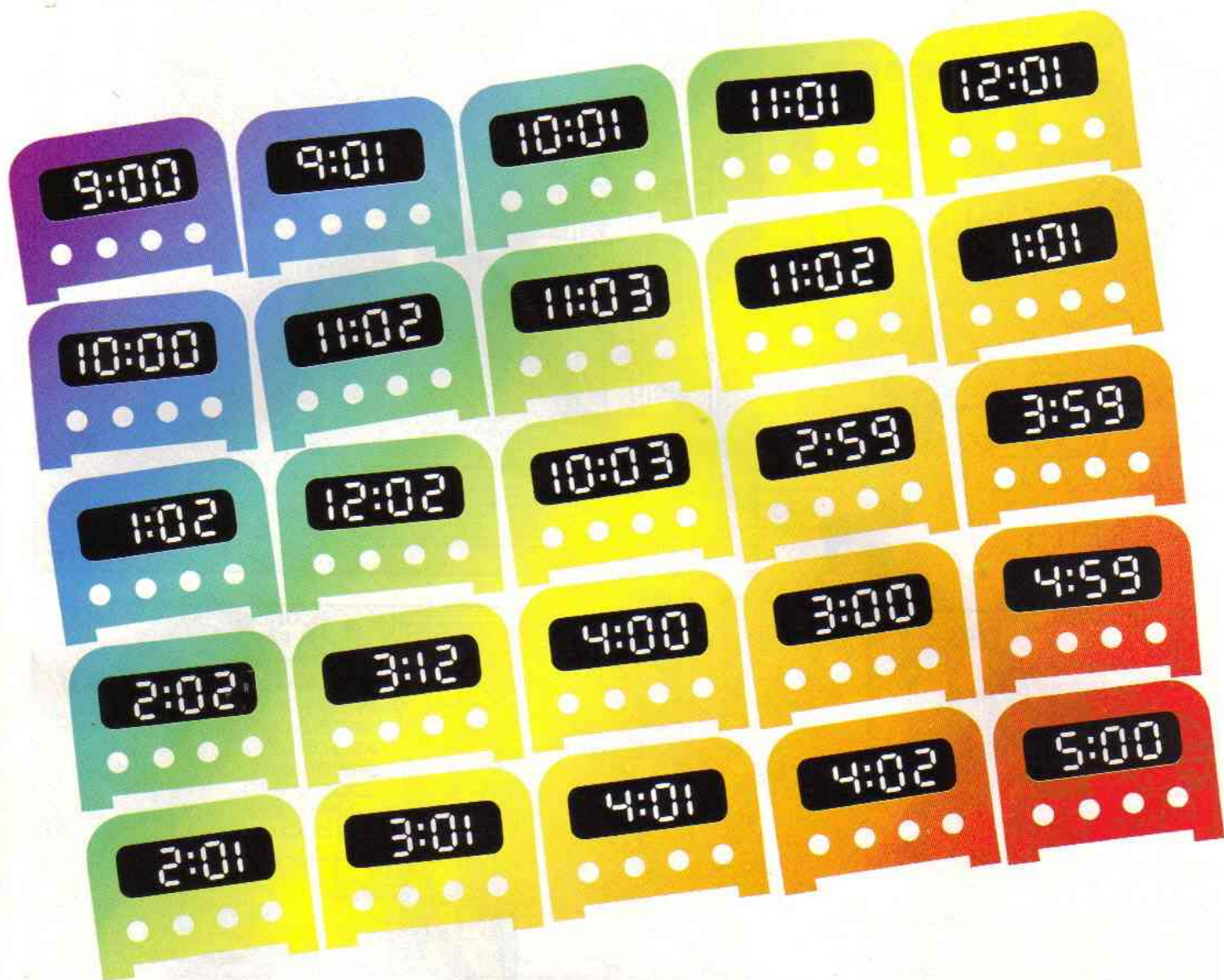
### Look Ma, No Hands! ▼

The last clock in this series is missing its hands. Can you figure out what time it should read so it will follow the pattern?





# Z Z L E S



## Nine to Five ▲

Find a path from 9:00 to 5:00. You can move up, down, left or right, but you *can't* move diagonally. And you can only move to a space if its time is exactly one minute or one hour earlier or later than the space you are on.

For example, from a 12:00 space, you could move to a space marked 11:00, 1:00, 12:01, or 11:59.

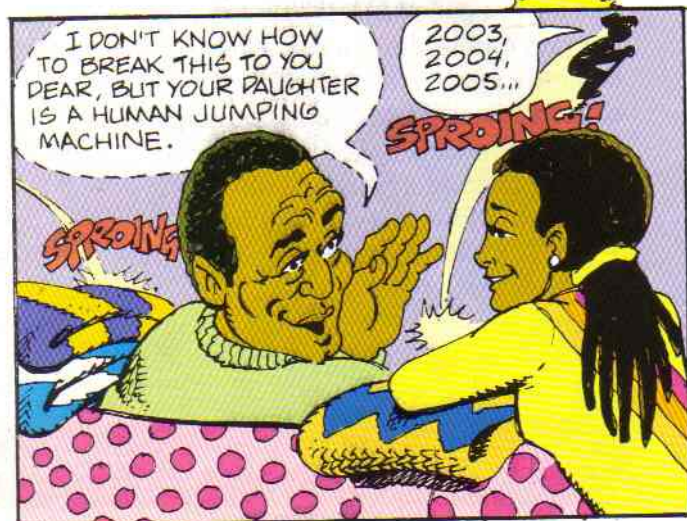
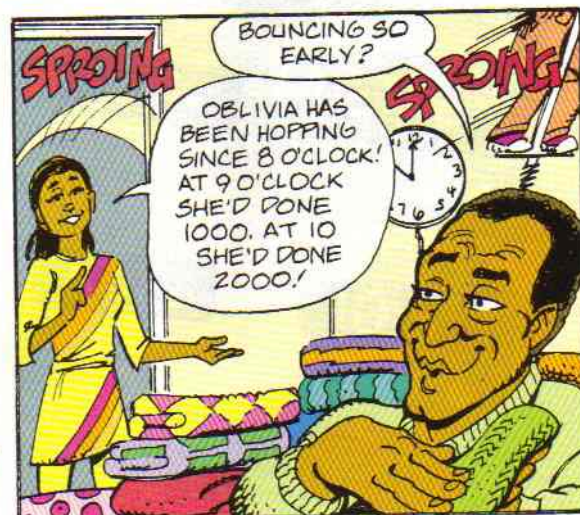
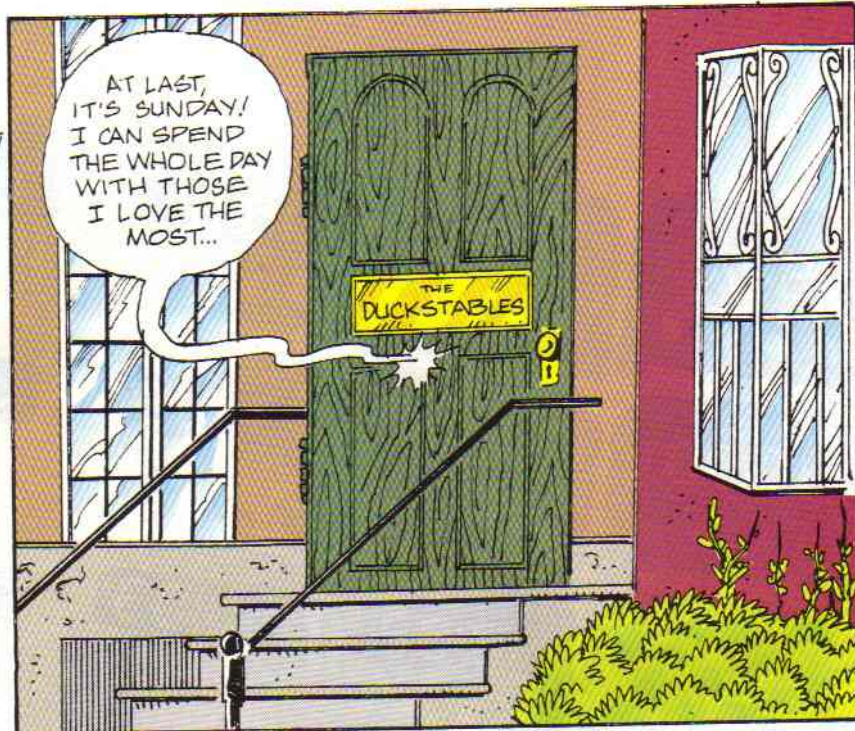
Answers on the Did It page.



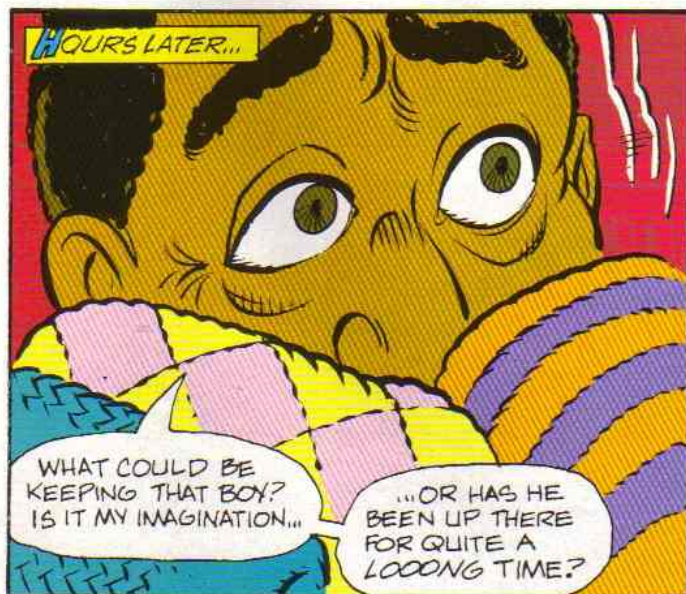
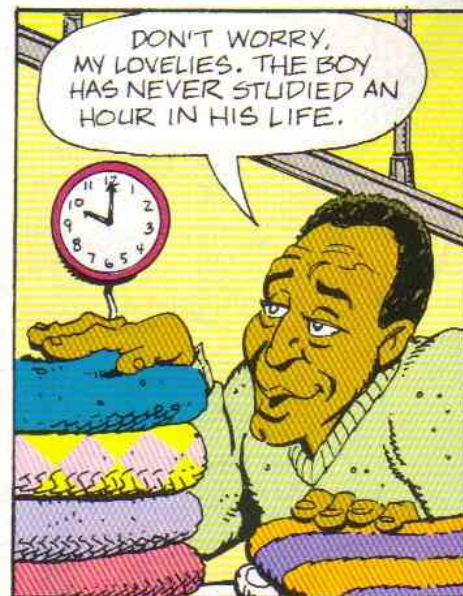
# THE COSTLY SHOW

A  
COMIC  
PUZZLE

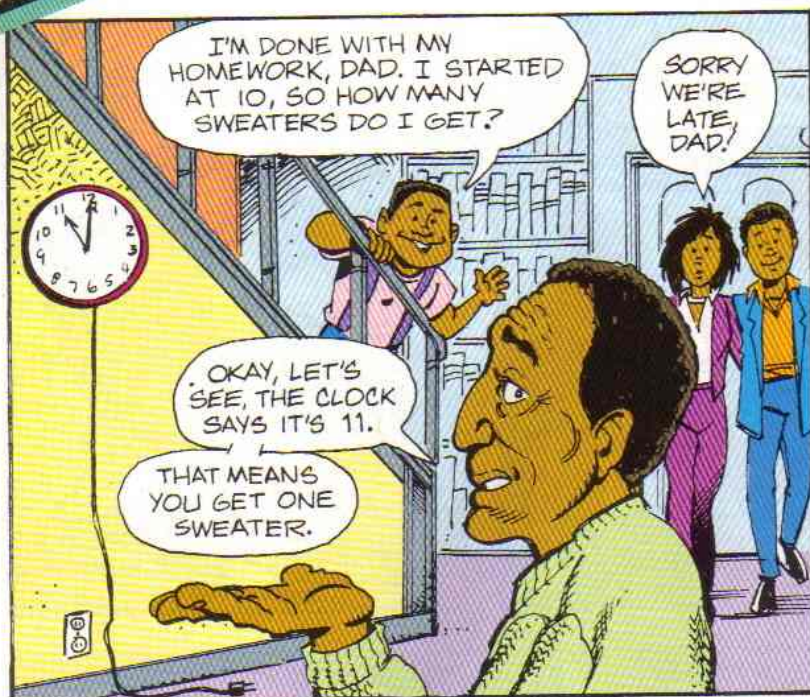
STORY:  
BILLY  
ARONSON  
ART:  
KEITH  
WILSON











**CAN YOU FIGURE OUT HOW MANY SWEATERS DR. DUCKSTABLE OWES FLEO?**

(DON'T WORRY, HE HAS HUNDREDS MORE IN HIS BASEMENT.)  
ANSWER ON THE DID IT PAGE.



## WONDER ABOUT

# The Wonder Years

Kevin is the star of the wonderful show *The Wonder Years*. But we wonder whether you'll be able to figure out how old he is.

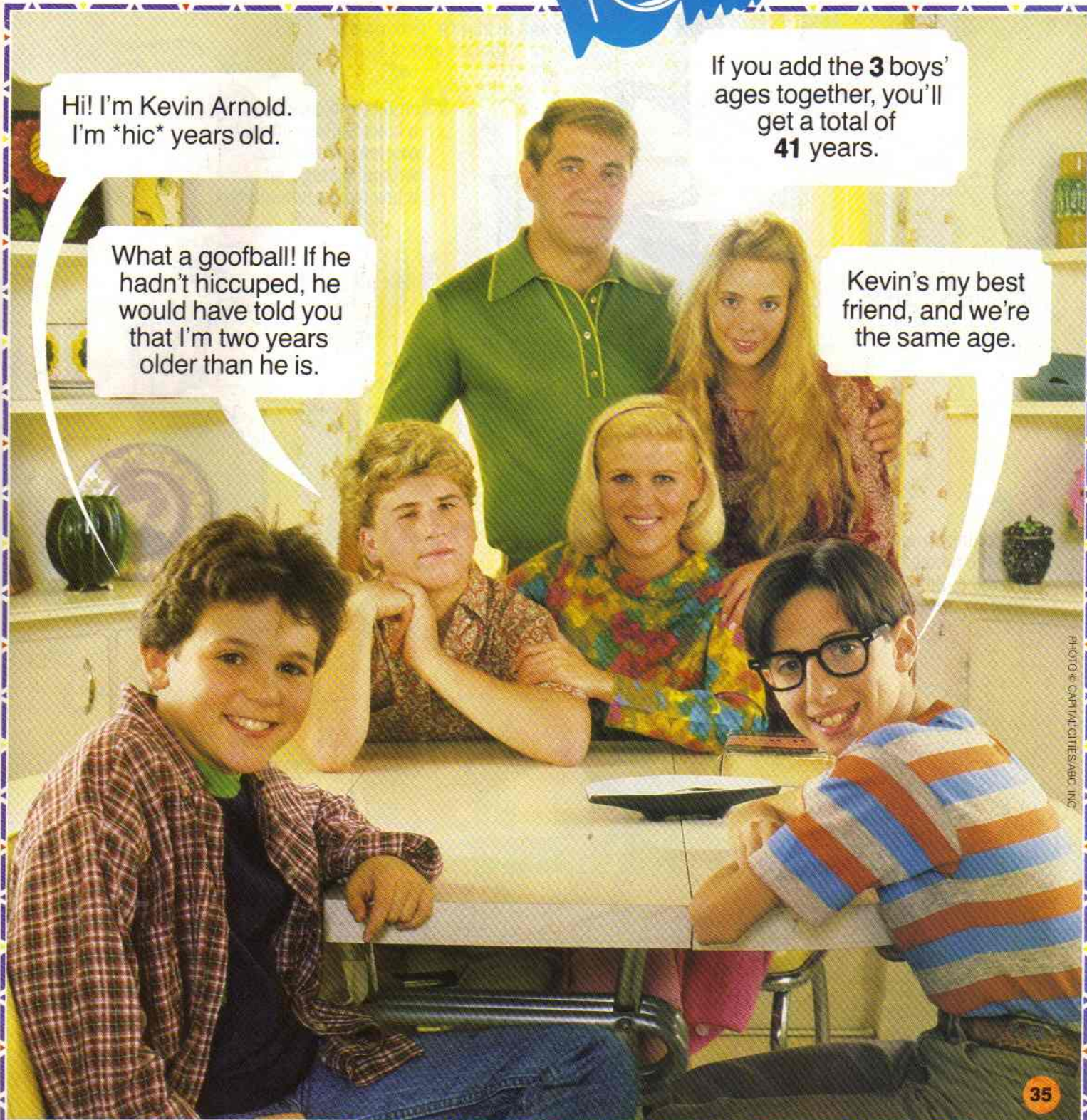
This puzzle is tricky. No wonder we put the answer on the Did It page.

Hi! I'm Kevin Arnold.  
I'm \*hic\* years old.

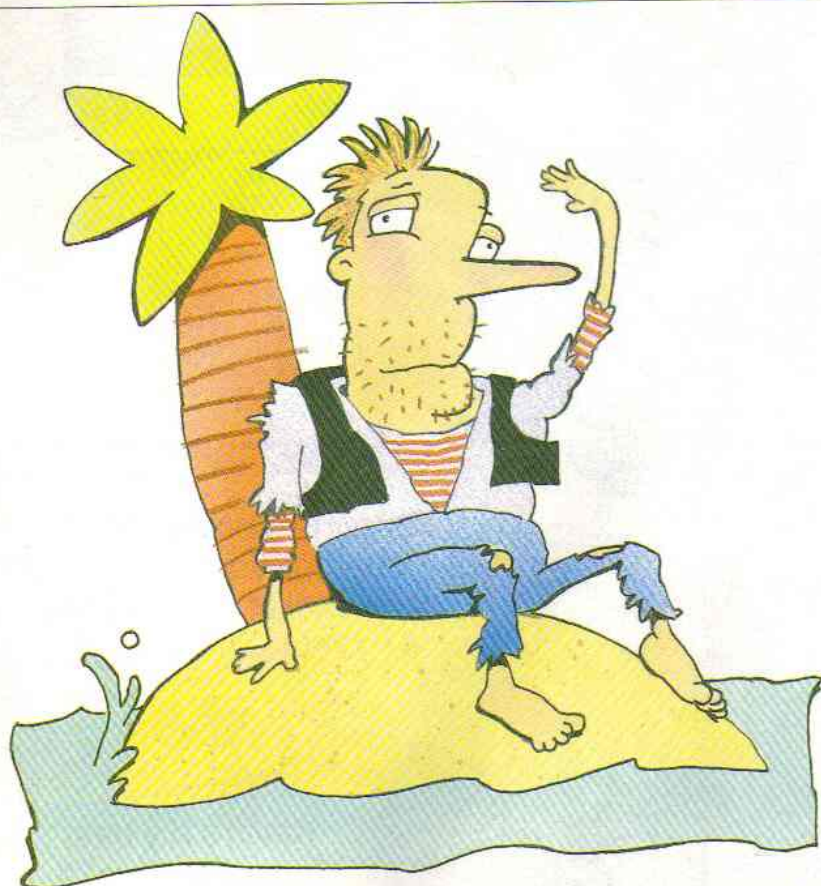
What a goofball! If he  
hadn't hiccuped, he  
would have told you  
that I'm two years  
older than he is.

If you add the **3** boys'  
ages together, you'll  
get a total of  
**41** years.

Kevin's my best  
friend, and we're  
the same age.





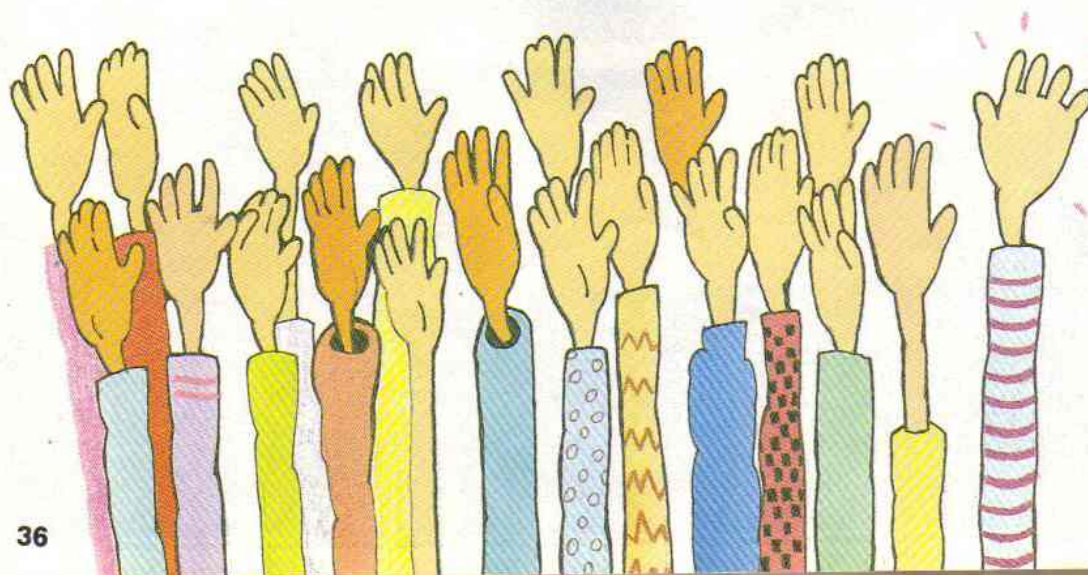


# FACT

**H**umans can survive a few minutes without oxygen, a few days without water, and a few weeks without food.



**T**he longest major league baseball game lasted eight hours and six minutes.

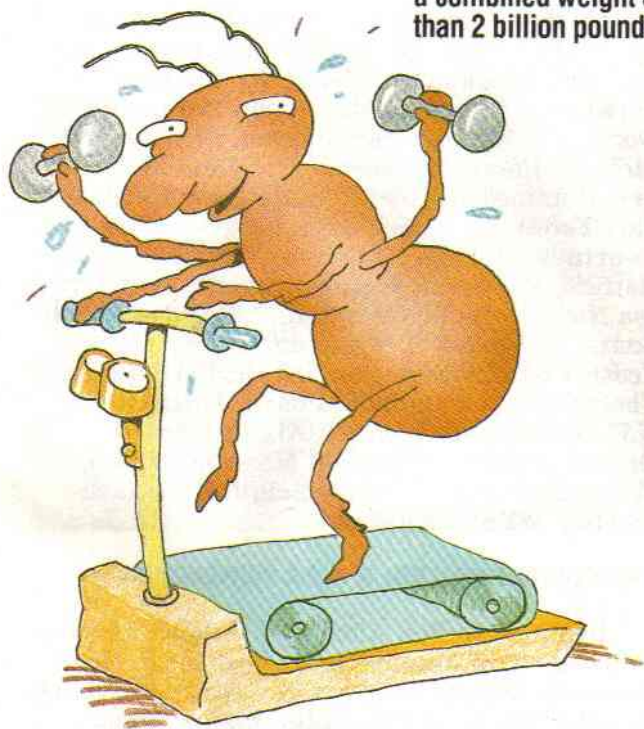


**O**ne out of every 20 people is left-handed.



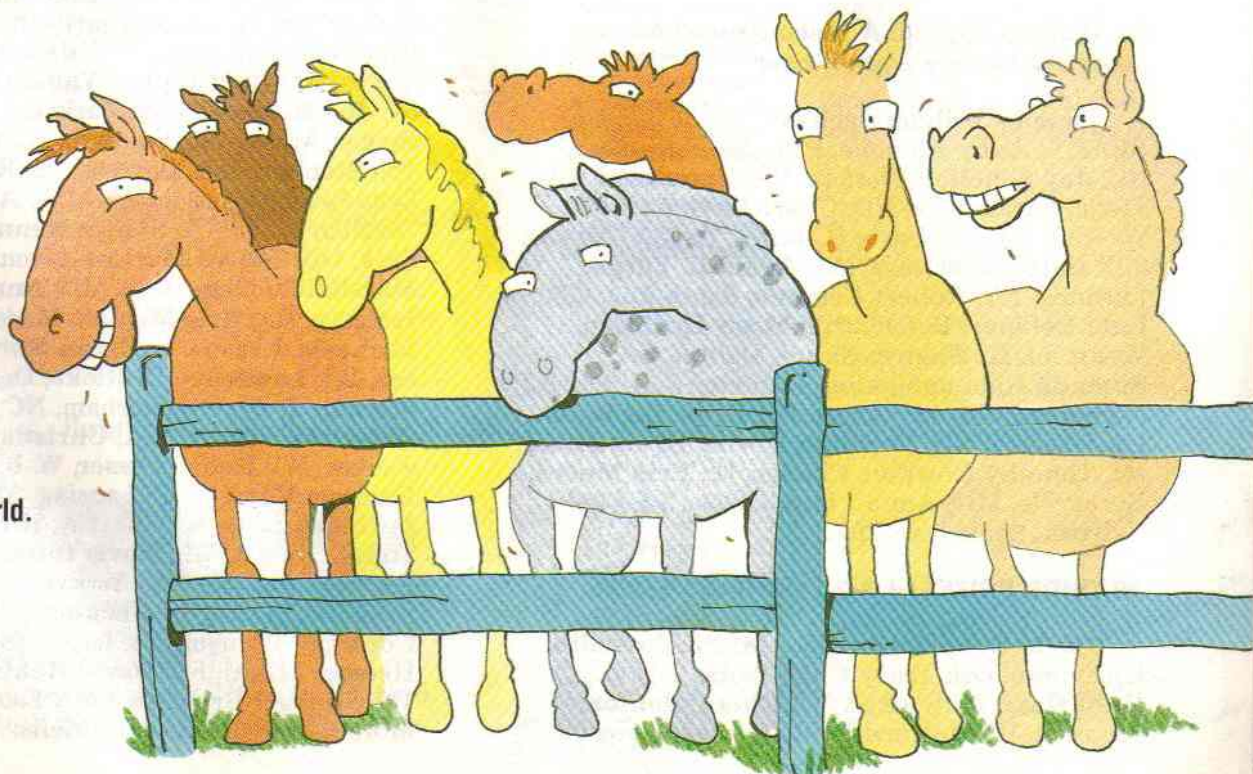
# Olds

**A**ll of the ants in the world have a combined weight of more than 2 billion pounds.



**M**ore than half of all Americans live in the same state where they were born.

**T**here are about 75 million horses in the world.







## **ANNOUNCING...The Winners of our 10th Anniversary Scavenger Hunt Contest!**

To help celebrate our 10th birthday, we ran a Scavenger Hunt Contest in our November 1989 issue. About 15,000 of you sent us the secret message: "We Are Ten." We chose all the winners at random from the correct answers.

We're sorry we can't give prizes to each and every one of you who entered. (If we did, we'd go broke!) But thanks so much for helping us to celebrate our birthday in such a big way.

And now...here are the names of all our winners.

**GRAND PRIZE: A trip for four people to Sea World in Orlando, Florida, including two nights at a Stouffer Orlando Resort.**

Donny McGuire, Pittsburgh, PA.

**FIVE FIRST PRIZES: An In The Dark™ strategy board game from Parker Brothers.**

Erin Caudle, Goldston, NC; Parker Altman, Belle Glade, FL; Ismael Alvarez, Washington, DC; Adrienne Hiltz, Nashville, TN; Cullen Ledet III, Gretna, LA.

**20 SECOND PRIZES: A Tonka Hyper™ Drivers superfast battery-powered car.**

Thomas William Jackson, Rio de Janeiro, BRAZIL; Andy Klemme, Pope Air Force Base, NC; Jay Scholten, Norfolk, VA; Gretchen Leah Tietje, Fayetteville, NC; Charlene Sonderfan, Wyckoff, NJ; Kimberly S. Jones, Englewood, CO; J.D. Balzli, Vancleave, MS; Adam B. Varga, Flushing, NY; Robert Cerrone, Santa Ana, CA; Imbi Delaney, Buffalo, NY; Missy Lydigsen, Westmont, IL; Sharon Shure, Duluth, GA; Sumathi Rajamanickam, Princeton Junction, NJ; Nicholas Sullivan, Tampa, FL; Drew Carlson, Londonderry, NH; Brandon Horne, Edwardsburg, MI; Timothy Rowden, Chicago, IL; Erin Moore, Burnsville, MN; Anna Pizza, Union, NJ; Leah Griffith, Eagle River, AK.

**30 THIRD PRIZES: A 3-2-1 CONTACT T-shirt.**

Darbi Buie, Bainbridge, GA; Nicole Smith, Uniontown, OH; Tracy Chin, Staten Island, NY; Brett Rose, Milwaukee, WI; Dina Colantonio, Johnston, RI; Howard D. Heerwagen, Arcadia,

TX; George Kimmel, Berrien Springs, MI; Daniel Busby, Hayward, CA; Meg Mahon, Ravena, NY; Barbara Bergman, Appleton, WI; Zachery Salwasser, Arlington, MA; Susan Bollman, Fort Worth, TX; Kataura Washington, Brooklyn, NY; Stefanie Poon, Sacramento, CA; Gina McKendry, Huntingdon Valley, PA; Matthew Retzlaff, Park Forest, IL; Youan Luyt, Longview, WA; Courtney Aldrich, Naubinway, MI; Chris Smiley, Hatfield, PA; Sarah Shapiro, Montpelier, VT; Alyssa Nickow, Buffalo Grove, IL; Devin Melancon, Scott, LA; Rachel S. Manning, Sylmar, CA; Jessica Graf, Washington, IN; Barbara Jones, Cherry Hill, NJ; Danielle Posch, Jefferson, OR; N.D. Somers, Montgomery, AL; Raj Arora, Orleans, Ontario, CANADA; Maya Stutzman, Yellow Springs, OH; Nicole Schiller, Henstedt-Ulzburg, WEST GERMANY.

**200 FOURTH PRIZES: A 3-2-1 CONTACT Yo-yo.**

Brandee Buller, Afton, WY; Adam Aichele, Stillwater, OK; Mandy Holtz, Bear Lake, MI; Wilmarie Muniz, Brooklyn, NY; Rochelle Colley, Beeville, TX; Huat-Chye Lim, Kuala Lumpur, MALAYSIA; Krista Richardson, Tolan, TX; Rob Kimble, Buckhannon, WV; Jason Doolittle, Tampa, FL; Christopher VanderBerg, Sheldon, IA; Jed Behar, Canoga Park, CA; Michael Field, Broken Arrow, OK; Susanne Ramsey, Gatlinburg, TN; Stephen Yeh, Dayton, OH; Krystyna Banas, Deep River, Ontario, CANADA; Austin Kurahone, Yokohama, JAPAN; Shawn Kenney, Fairview Park, OH; Daniel Marlow, Livonia, MI; Blair Marshall, College Park, MD; Ann Russell, Torrance, CA; Eric Meidell, Madera, CA; Josh Michaels, Urbana, IL; Ryan Horvath, Milwaukee, WI; Lawrence R. Hicke, Oceanside, CA; Morgan T. Bryers, Durham, NC; Andrea Bidowski, Concord, CA; Christian Weigert, Milwaukee, WI; Renee Lesser, W. Bloomfield, MI; Damona Resnick, E. Lansing, MI; M. Barnabas Sprinkle, Lawrenceville, GA; Kimberly Dawn Tullet, Sturgis, MI; Travis Gass, Bangor, ME; Rachel Shapiro, New York, NY; Aaron Good, Evanston, IL; David Heckman, Bel Air, MD; Corwin Wilkinson, Ft. Lauderdale, FL; Julia Herzog, Miami, FL; David Renfro, Kingsport, TN; Michael Branden Rice, Louisville, KY; Scott Monahan, Fairfield, OH; Melissa McDowell,



APO, NY; **Kristin Lynn Lammers**, Powells Point, NC; **Erma Adams**, Brooklyn, NY; **Tammy Sandoval**, Fremont, CA; **Mary Hanks**, Sun Prairie, WI; **Matthew Corbo**, Suffern, NY; **Tiffany Ambiel**, Astoria, OR; **Darren Waltman**, Lakewood, CO; **Michelle Ellett**, Hollister, MO; **Jill Sonnenberg**, Westfield, WI; **Clayton Keyes**, Tulsa, OK; **Stephanie Smith**, Nashua, NH; **Casey A. May**, Cerritos, CA; **Stephanie Matthews**, APO, San Francisco, CA; **Becky Pitzer**, Catawissa, MO; **Julie West**, Bozeman, MT; **Tarita Holloway**, Chicago, IL; **Leah Yost**, Apache Junction, AZ; **Alexis Podolny**, Columbia, MD; **Aric Grez**, Little Silver, NJ; **Kira Rosen**, West Long Branch, NJ; **Louisa Benachenhau**, Newington, CT; **Bethany Short**, Jacksonville, FL; **Clint Huschka**, Hutchinson, KS; **Wayne Hughes**, Molena, GA; **Patrick Fehling**, Kohler, WI; **David Kaplan**, Middletown, NJ; **Betsy Basch**, Temperance, MI; **Natalie Falkenberg**, Prospect, CT; **Aaron Goodman**, West Bloomfield, MI; **Kate Trautmann**, Chula Vista, CA; **Saul Villalobos**, Fay, NC; **Coral Biron**, Meriden, CT; **Amy Winkle**, Centre, AL; **William Hayes**, Los Angeles, CA; **Heather Hughes**, Hampton, VA; **Jennifer Dunston**, Stratford, CT; **Kacy Garske**, Ironwood, MI; **Jessica Smith**, N. Andover, MA; **Connor Lewis**, Kissimmee, FL; **Michael Viola**, Narberth, PA; **Taras Kulynych**, Philadelphia, PA; **Rebecca Cook**, Cincinnati, OH; **Joel T. Hartse**, Spokane, WA; **Betsy Stelmacher**, Duluth, MN; **Ali Juma**, Toronto, Ontario, CANADA; **George Casey**, Summit, NJ; **Amanda Dotson**, Galveston, TX; **Cathy Arnette**, Chesapeake, VA; **Heather Brown**, Altamonte Springs, FL; **Anna Benson**, Kings Park, NY; **Wendi Ruef**, Auburn, WA; **Peter M. Huoppi**, Pomfret, CT; **Lisa Wagner**, Northville, MI; **Eric Hole**, New Haven, CT; **Sarah Bard**, University City, MO; **Arif Marshall**, Mobile, AL; **Miles M. Masog**, Lebanon, OR; **Paul MacGregor**, Roanoke, VA; **Richard S. Krutil**, Mariposa, CA; **Tiffany Taylor**, Corsicana, TX; **Chris Morton**, Sacramento, CA; **Teresa Chang**, Richardson, TX; **Jessica Price**, Dwight, IL; **Marla Vice**, Carlisle, KY; **Shannan Watkins**, Brunswick, GA; **Serena El-Farra**, Carson, CA; **Lindsay Fields**, Gulf Breeze, FL; **Craig Edwards**, Ponchatoula, LA; **Brian Welshimer**, Nampa, ID; **Jamie Ohlendorf**, Wayland, MI; **Stefany Laury**, Norfolk, VA; **Steven Yates**, Cabot, AR; **Amy Commander**, Jacksonville, FL; **Heather Wright**, St. Johnsbury, VT; **Elaina Baumanis**, Levittown, NY; **Rayanne Kaanapu**, Hilo, HI; **Ian Templeton**, Sandpoint, ID; **Sara Clark**, Gardiner, ME; **Terri Thompson**, Alice, TX; **David Moulder**, Kokomo, IN; **Barbara Lauriat**, New Salem, MA; **Cheryl Mauro**, Huntington, NY; **Maher Chrystal**, Venice, CA; **Cody Tuthill**, Snohomish, WA; **Scott Schouweiler**, Arden Hills, MN; **Eric Benton**, Lago Vista, TX; **Tung Huynh**, San Jose, CA; **Adrian Villarreal**, Woodburn, OR; **William Mehl**, Middletown, OH; **Scott Laxson**, Euless, TX; **Victoria L. Villagrana**, Marion, NC; **Lauren Coil**, Ellisville, MO; **Jodi Thomas**, Millville, NJ;

**Joshua Smale**, Birch Run, MI; **Stefanie M. Anderson**, Lopez Island, WA; **Thomas Lee Aanerud**, Brunswick, ME; **Christina Sunday**, Eldridge, IA; **Tujanna Roberts**, Pinnacle, NC; **David Tallent**, Dumfries, VA; **Mark Warren**, Staten Island, NY; **Nicole Santoro**, Beverly, MA; **Aric Lum**, Honolulu, HI; **Sarah Rifaat**, Houston, TX; **Mary Andersen**, Phoenix, AZ; **Rachel Nixon**, Iowa City, IA; **Aaron Guio**, Weirton, WV; **Dana Parker**, Chester, SC; **Kristofer M. Sallee**, Chanute, KS; **Janelle Kuroda**, Keaau, HI; **Sonia Walker**, Loveland, CO; **Bob Farrell**, Tulsa, OK; **Becky Camp**, Hockessin, DE; **Galen Scott**, Holland, PA; **Charlotte Chua**, Flushing, NY; **Erin Milligan**, Bear, DE; **Ann Ritter**, Philadelphia, PA; **Wesley Lutz**, Fairmount, IN; **Nate Holloway**, Belmont, MA; **Jamie Porter**, Agoura, CA; **Greg Wolfe**, Glenshaw, PA; **James Tardiff**, Hinesville, GA; **Daimon Forsch**, Spencer, NE; **Mary Bauman**, Remus, MI; **Ariel Blumenthal**, Brooklyn, NY; **Conor McNassar**, Portland, OR; **Andrea Brady**, Huntsville, AL; **Kate Moore**, Brooklyn, NY; **Jason Gaston**, Allentown, PA; **Lisa Brending**, Brenham, TX; **Robert Brown**, Punta Gorda, FL; **Nilesh Patel**, Houston, TX; **Christine Down**, Cabery, IL; **Tiffany Shinn**, Waipahu, HI; **Claire Wood**, Houston, TX; **Maureen Herron**, Minneapolis, MN; **David Whitaker**, Mechanicsville, MD; **Solana Bolton**, Homestead, FL; **Erika Leckington**, Ewing, NJ; **Carol Knapp**, Franklin, MA; **Virginia Henderson**, Troy, AL; **Lisa Blesa**, San Marino, CA; **Kate Hayward**, Narr, RI; **Christine Clyne**, Arvada, CO; **Lorelei Agbayani**, Daly City, CA; **Michael Davis**, Lake Charles, LA; **Allyn Cronk**, Hoboken, NJ; **James Webb**, Davie, FL; **Jennifer Norris**, Bronson, FL; **Roger Davis**, Northampton, MA; **Stacy Miller**, Midlothian, VA; **Casey Hohne**, Mattapoisett, MA; **Brooke Ellis**, Lees Summit, MO; **J.P. Edwards**, Birmingham, AL; **Matthew Ehlers**, Lincoln, NE; **Mandy Weir**, Long Beach, MS; **Jessica Herschman**, Bismarck, ND; **Jyoti Reddi**, Bronx, NY; **Tabitha Holley**, New Smyrna Beach, FL; **Emily Hague**, Weare, NH.

## We Want Mail!

Dear Readers:

We love hearing from you. Your questions and ideas help us make CONTACT a better magazine. So why not drop us a line? We can't answer every letter, but we do read them all. Send your mail to:

3-2-1 CONTACT: Letters  
P.O. Box 40  
Vernon, NJ 07462





# BASIC TRAINING

## Programs For Your Computer

### BYTE BEACH

**T**his program is all wet. Not only that, it's full of sand and has a bad case of sunburn. What else would you expect from a program that helps you have fun at the beach? Not a real beach, of course, but a computerized one.

The object of the game is simple—have fun at the beach for as long as you can. You can go for a swim, buy a hot dog or sit on your blanket. Just keep an eye on your beach fun index number—the higher it is, the more fun you're having.

If you get too hot or too cold, your index will drop. It will also go down if you get hungry. And if it drops below 100, you'll be so miserable, you'll go home. But between the sun, the sand and the sharks, having fun is not as easy as it sounds. How long can you stick it out?

The program is written for Apple II computers. To change it for IBM machines, just change the word HOME to CLS. For Commodore 64/128 change HOME to PRINT CHR\$(147).

```

10 REM BEACH FUN
20 DIM TS(11),PS(10),HS(10),DS(10)
30 FOR X = 1 TO 11
40 READ AS:TS(X) = AS:NEXT X
50 FOR X = 1 TO 6
60 READ AS:PS(X) = AS:NEXT X
70 FOR X = 1 TO 8
80 READ AS:HS(X) = AS:NEXT X
90 FOR X = 1 TO 4
100 READ AS:DS(X) = AS:NEXT X
110 P = 2:T = 5:H = -1:S = -1
120 D1 = 0:D = 0:M = 0
130 W = 0:L = 15:F = 70
140 HOME:M = M + 15
150 D1 = D1 + D
160 IF D1 > 1 THEN D1 = 0:D = 0
170 L = L - 1:IF L < 2 THEN L = 2
180 S = S + 1:IF P = 1 THEN
    S = 0

```

```

190 IF P = 1 THEN T = T - 1
200 IF T < 1 THEN T = 1
210 IF P > 1 THEN T = T + 1
220 IF T > 11 THEN T = 11
230 IF P < > 6 THEN 250
240 IF W = 1 THEN H = 0:GOTO
    280
250 H = H + 1
260 IF H > 8 THEN H = 8
270 U = 1:F2 = 0:F3 = 0
280 Q = ABS(T - 6)
290 IF Q > 5 THEN U = 2
300 F1 = Q * U + H + S
310 IF T = 6 THEN F2 = 20
320 IF H = 0 THEN F3 = 10
330 F = F - F1 + F2 + F3
340 F = F - Q
350 IF F < 1 THEN 1120
360 PRINT "BEACH STATUS
    REPORT"
370 PRINT "TIME AT BEACH:"
    ,M " MINUTES"
380 PRINT
390 PRINT "YOU ARE:"
400 PRINT PS(P)
410 PRINT "YOUR TEMPERATURE
    IS:" ,TS(T)
420 IF H < 4 THEN 460
430 PRINT "YOU ARE" ,HS(H)
440 IF S < 4 THEN 460
450 PRINT "YOU ARE COVERED
    WITH SAND"
460 IF P < > 6 THEN 490
470 IF W = 1 THEN PRINT "YOU
    JUST ATE A HOT DOG":D = 1
480 IF W = 0 THEN PRINT "YOU
    LEFT YOUR WALLET AT YOUR

```



ILLUSTRATIONS BY FRANK LEVY



```

BLANKET"
490 PRINT "YOUR BEACH FUN
INDEX IS: ";F
500 PRINT
510 PRINT "WHERE WOULD YOU
LIKE TO GO?"
520 PRINT "(CHOOSE ONE BY
NUMBER)"
530 ON P GOTO 540,650,730,820,
930,1040
540 REM IN THE WATER
550 Z = 1
560 GOSUB 1160
570 IF C = 1 THEN 640
580 IF C < > 2 THEN 620
590 P = 2
600 A = INT ( RND (1) * L) + 1
610 IF A = 1 THEN P = 3
620 IF C = 3 THEN P = 4
630 IF C = 4 THEN 1120
640 GOTO 140
650 REM YOUR BLANKET
660 Z = 2:W = 1
670 GOSUB 1160
680 IF C = 1 THEN P = 1:T =
7:W = 0
690 IF C = 2 THEN P = 2
700 IF C = 3 THEN P = 4
710 IF C = 4 THEN 1120
720 GOTO 140
730 REM LOST
740 Z = 5
750 GOSUB 1160
760 IF C = 1 THEN P = 1:T = 6:S =
0:GOTO 810
770 IF C = 4 THEN 1120
780 IF C = 3 THEN P = 4:
GOTO 810
790 A = INT ( RND (1) * L) + 1
800 IF A = 1 THEN P = 3
810 GOTO 140
820 REM WAY TO STAND
830 Z = 5
840 GOSUB 1160
850 IF C = 1 THEN P = 1:T = 7:
GOTO 920
860 IF C = 4 THEN 1120
870 IF C = 3 THEN P = 6
880 GOTO 920
890 P = 2
900 A = INT ( RND (1) * L) + 1
910 IF A = 1 THEN P = 3
920 GOTO 140
930 REM WAY BACK FROM
940 Z = 5
950 GOSUB 1160
960 IF C = 1 THEN P = 1:T =
7:W = 0:GOTO 1030
970 IF C < > 2 THEN 1010
980 P = 2
990 A = INT ( RND (1) * L) + 1

```

```

1000 IF A = 1 THEN P = 3
1010 IF C = 3 THEN P = 4
1020 IF C = 4 THEN 1120
1030 GOTO 140
1040 REM HOT DOG STAND
1050 Z = 3
1060 GOSUB 1160
1070 IF C = 1 THEN P = 5
1080 IF C = 2 THEN P = 5
1090 IF C = 3 THEN P = 6
1100 IF C = 4 THEN 1120
1110 GOTO 140
1120 HOME
1130 PRINT "YOU WENT HOME
AFTER ";M;" MINUTES"
1140 PRINT "YOUR BEACH FUN
INDEX IS: ";F
1150 END
1160 REM TRAVEL SUBROUTINE
1170 Y = 0:A = 1
1180 FOR X = 1 TO 4
1190 IF X < > Z THEN 1220
1200 PRINT X;" STAY WHERE YOU
ARE"
1210 GOTO 1230
1220 PRINT X;" ";DS(X)
1230 NEXT X
1240 INPUT CS
1250 C = VAL (CS)
1260 IF C < 1 OR C > 4 THEN 1180
1270 IF C < > 1 THEN 1340
1280 IF D = 1 THEN PRINT "YOU
JUST ATE — CHOOSE AGAIN.";
GOTO 1180
1290 IF Y = 1 THEN 1320
1300 A = INT ( RND (1) * L) + 1
1310 IF A > 1 THEN 1340
1320 PRINT:PRINT "THERE ARE
SHARKS IN THE WATER.
CHOOSE AGAIN."
1330 Y = 1:GOTO 1180
1340 RETURN
1350 DATA FROZEN SOLID, EVEN
COLDER, ICE COLD, CHILLY,
COOL, JUST FINE, WARM, HOT,
EVEN HOTTER, BOILING,

```

```

BURNT TO A CRISP
1360 DATA IN THE WATER, AT YOUR
BEACH BLANKET, LOST-CAN'T
FIND YOUR BLANKET, ON THE
WAY TO THE HOT DOG STAND,
ON THE WAY BACK FROM THE
HOT DOG STAND, AT THE HOT
DOG STAND
1370 DATA X, X, X, HUNGRY, VERY
HUNGRY, STARVING, ABOUT
TO FAINT FROM HUNGER,
READY TO EAT A SEAGULL
1380 DATA THE WATER, YOUR
BEACH BLANKET, THE HOT
DOG STAND, HOME

```

## SEND US YOUR PROGRAMS

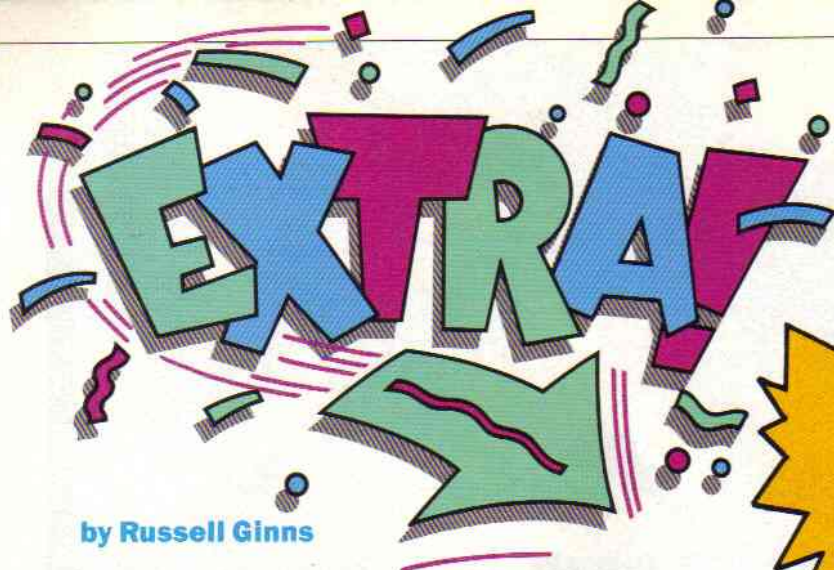
If you've written a program you'd like us to print, send it in. If we like it, we'll print it and send you \$25. Include a note telling us your name, address, age, T-shirt size and type of computer.

All programs must be your own original work. We cannot return programs. Please do not send discs.

Send your programs to:







by Russell Ginns

## A SUPER WORD SEARCH CONTEST

### How To Solve The Puzzle:

We've hidden 36 summer fun words in this puzzle. They are places to go, things to do, food, toys, and a lot of other stuff that make summer a blast! Words go up, down, across, backwards and diagonally.

### How To Enter The Contest:

The leftover letters in the puzzle spell an event that happens every summer. Write the event on a piece of paper and mail it to:

**Summer Fun Contest**  
**3-2-1 Contact Magazine**  
**P.O. Box 40**  
**Vernon, NJ 07462**

We'll randomly draw a winner from all the correct answers. The first-prize winner will get a box full of fun stuff. Five second-place winners will get their very own 3-2-1 Contact T-shirts.

**First Prize:** A Summer Fun Kit, including a Frisbee, a kite, sunglasses, a yo-yo and other fun summer stuff!

**10 Second Prizes:** A CONTACT T-shirt!

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G | L | E | M | O | N | A | D | E | N | U | R | B | Y |
| N | H | S | O | C | C | E | R | E | S | U | N | A | K |
| I | C | Y | D | M | I | W | S | E | D | I | L | S | S |
| W | A | N | O | O | L | L | A | B | T | K | H | E | L |
| S | E | E | G | Y | S | E | E | S | A | W | R | B | O |
| F | B | C | A | N | O | E | S | I | O | U | T | A | O |
| T | I | C | B | D | N | U | O | R | G | Y | A | L | P |
| E | C | A | I | R | R | S | L | F | T | H | G | L | O |
| N | E | M | K | F | L | E | L | C | I | S | P | O | P |
| N | C | P | E | A | W | F | S | E | L | B | B | U | B |
| I | R | J | D | O | S | K | A | T | E | H | S | I | F |
| S | E | N | T | U | L | H | U | L | A | H | O | O | P |
| B | A | T | H | I | N | G | S | U | I | T | C | A | T |
| S | M | Y | K | I | T | E | P | O | R | P | M | U | J |

|           |            |           |              |         |
|-----------|------------|-----------|--------------|---------|
| Run       | Swing      | Sun       | Bathing Suit | Frisbee |
| Baseball  | Bike       | Ice Cream | Surf         | Kite    |
| Park      | Sandals    | Fish      | Tennis       | Beach   |
| Camp      | Bubbles    | Skate     | Hula Hoop    | Slide   |
| Sky       | Swim       | Yo-yo     | Pool         | Tag     |
| Cat       | Soccer     | Balloon   | Lemonade     | Towel   |
| Canoe     | Playground | See Saw   | Popsicle     | Dog     |
| Jump rope |            |           |              |         |



## ROLLER MAZE

Can you help Albert and Hilda find their way to the roller skate park?

Roll to the Did It page for the answer.



ILLUSTRATIONS BY RICHARD WEISS

## BATS!

Count Dimitri Garbonov has bats in his belfry. But that's okay—he loves bats! Look carefully and you'll see that two of the bats are exactly the same. Can you spot the identical creatures of the night?

Answer on the Did It page.





# Did it

## THE WONDER YEARS

Kevin is 13 years old.

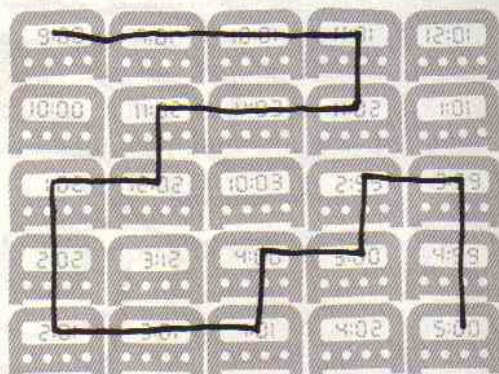
## STOP WATCH

The time is 8:28.

## LOOK MA, NO HANDS!

The last clock should read 6:45.

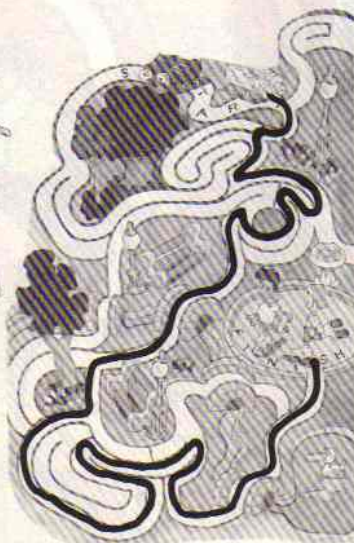
## NINE TO FIVE



## BATS



## ROLLER MAZE



## THE COSTLY SHOW

Dr. Duckstable owes Fleo four sweaters.

## CORRECTION

The writer of the story, "Special Delivery: CONTACT Visits a Hospital for Horses" in our April 1990 issue was Sara Seigle. We apologize for misspelling her name.

## NEXT MONTH

Here's a look at what's coming in the September 1990 CONTACT:

## SPACE CAMP

What's it like to train to be an astronaut? CONTACT editor Russell Ginns went to Space Camp in Huntsville, AL, to find out!

## OIL SPILLS AND WILDLIFE

Oil spills can be deadly for birds, mammals and other marine life. Meet some people who spend their time cleaning up oily animals to help them to survive.

## FUTURE VIEWS

The future holds all sorts of surprises when it comes to TV, telephones and gadgets that will help you see things more clearly. This story will give you a view of what may be in your future.

## PLUS

SQUARE ONE TV

FACTOIDS

ANY QUESTIONS?

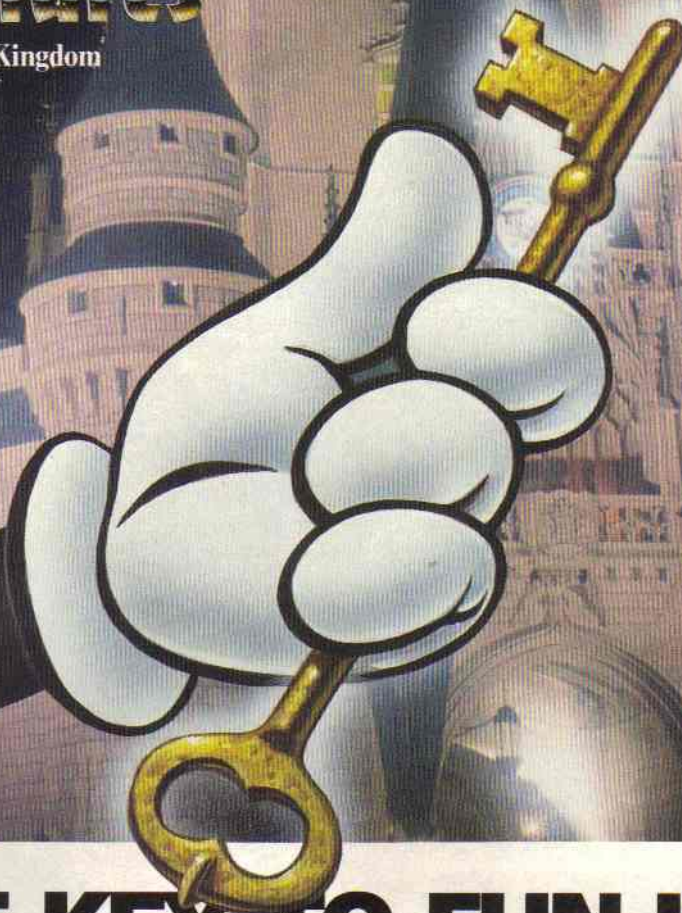
AMAZING SCIENCE TRIVIA

BASIC TRAINING

AND MUCH, MUCH MORE!



Disney's  
**Adventures**  
 In The Magic Kingdom



Licensed by Nintendo  
 for Play on the  
**Nintendo**  
 ENTERTAINMENT  
 SYSTEM

Official  
**Nintendo**  
 Seal of Quality

# THE KEY TO FUN IS IN DISNEY'S ADVENTURES IN THE MAGIC KINGDOM.



Goofy left the Golden Key inside the Enchanted Castle. Without it, the parade can't begin! To enter the Castle, you must help Mickey Mouse find six Silver Keys that are scattered throughout the Magic Kingdom. Can you find them?



You'll soar through the galaxy in Space Mountain, clash with buccaneers in Pirates of the Caribbean, and tangle with some nasty ghosts in the Haunted Mansion. Discover the wonders of the Magic Kingdom in your quest for the six Silver Keys.



• Meet old friends, including Mickey Mouse, Donald Duck, and Goofy.

• Explore all your favorite attractions, such as Big Thunder Mountain and Autopia.

• The most exciting rides in the Magic Kingdom will be all yours!



**CAPCOM**  
 USA

3303 Scott Blvd.  
 Santa Clara, CA 95054  
 (408) 727-0400



# Makin' it with Olympic!

Get **SUPER PRIZES!**  
Earn **EXTRA CASH!**  
Join our team **NOW!**

CALL US FREE . . . and you're on your way! Earn FAMOUS-NAME PRIZES or \$2.00 an item CASH just by selling high-quality Olympic products to your friends, relatives and neighbors!

We'll send you FREE Prize Catalog and FREE 1990 "Show 'n Sell" Catalog of attractive Christmas Cards, Stationery, All-Occasion Cards and Gifts. Everything you need to start!

You pay nothing, return nothing! So CALL US NOW!

OLYMPIC SALES CLUB, INC.  
Dept. 90CT7, Enfield, CT 06082  
Call Free: 1-800-777-8907 • Ask for Val



GRAFFITI GEAR  
Sell 10 Items

ANSKO CAMERA OUTFIT  
Sell 14 Items

SWISS ARMY KNIFE & SHEATH  
Sell 10 Items

WILSON "AERION" SOCCER BALL  
Sell 12 Items

CASIO MINI-KEYBOARD  
Sell 22 Items

MAGNAVOX 13" COLOR TV  
Sell 110 Items

GIRL TALK "DATE LINE" GAME  
Sell 10 Items

"WIZ" PERSONAL LOCKER  
Sell 12 Items

CBS CD'S AND CASSETTES  
Sell 7 Items

TIMEX CALCULATOR ALARM WATCH  
Sell 8 Items

"JAMINATOR" ELECTRONIC GUITAR  
Sell 55 Items

VALTERA SKATEBOARD  
Sell 21 Items

L.I. FRIDGE STATIONERY SET  
Sell 9 Items

PENTAX 35mm CAMERA OUTFIT  
Sell 29 Items

SEVILOR SNOW 'N' SURF TUBE  
Sell 7 Items

SONY WATCHMAN 2" TV  
Sell 65 Items

UNISONIC "SEE-THRU" PHONE  
Sell 20 Items

G.E. STEREO CASSETTE PLAYER  
Sell 9 Items

TIGER GAME WATCHES  
Sell 7 Items each

NIKKO "TURBO WARRIOR" R/C CAR  
Sell 19 Items

WILSON "JOE MONTANA" FOOTBALL  
Sell 11 Items

LORUS CHRONO-ALARM WATCH  
Sell 9 Items

G.E. "ACTION" AM/FM STEREO CASSETTE  
Sell 21 Items

NINTENDO "ACTION" GAME SYSTEM  
Sell 60 Items

WILSON "MICHAEL JORDAN" BASKETBALL  
Sell 8 Items

UNISONIC MEMORY BANK CALCULATOR  
Sell 14 Items

TASCO JUNIOR SCIENTIST KIT  
Sell 11 Items

G.E. TELEPHONE CLOCK RADIO  
Sell 19 Items

G.E. "MUSIC-MATE" COMPACT STEREO SYSTEM  
Sell 60 Items

WILSON "JOE MONTANA" FOOTBALL  
Sell 11 Items

UNISONIC "JUMBO DISPLAY" SOLAR CALCULATOR  
Sell 7 Items

SUPERIOR GUMBALL BANK  
Sell 8 Items

TIMEX "AEROBIX" WATCH  
Sell 11 Items

NFL FILMS VIDEO  
Sell 10 Items

RCA CLOCK RADIO  
Sell 14 Items

NINTENDO "GAME BOY"  
Sell 60 Items

ROSE ART DELUXE ART CADDY  
Sell 8 Items

NINTENDO GAME CARTRIDGES  
Sell 20 Items each

TEENAGE MUTANT NINJA TURTLES SLEEPING BAG  
Sell 15 Items

2-IN-1 FISHING OUTFIT  
Sell 12 Items

COLUMBIA "MOUNTAIN SPORTS" BIKE  
Sell 65 Items

WESTCLOX DIGITAL CLOCK  
Sell 7 Items

THE AQUA TANK  
Sell 10 Items

TASCO TELESCOPE  
Sell 19 Items

TASCO MICROSCOPE LAB  
Sell 12 Items

TIGER "BO JACKSON" FOOTBALL AND BASEBALL  
Sell 14 Items

© 1990 OLYMPIC SALES CLUB, INC.

NOW...you make **MORE** with Olympic!

**\$2** CASH PROFIT  
on  
**EVERY ITEM!**

Or great PRIZES that are easier to get!

**PHONE FREE**

Any day . . . any time . . . 7 days a week, including Sunday

**1-800-777-8907**

Ask for Val



She or another operator is waiting to rush your name, address and zip code to us.

\* PLEASE . . . operators can take name and address only . . . CANNOT answer questions. (Olympic's service is available in all 50 United States and Puerto Rico. Alaska and Hawaii included.)